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Theory of Accounts

125 ILLUSTRATIONS

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THEORY OF ACCOUNTS
By Editorial Staff, International Correspondence Schools
OPERATING ON THE NEW YORK STOCK EXCHANGE
and
STOCK BROKERAGE ACCOUNTING METHODS
By W. A. Fordham, Formerly of Auditing Department of the New York Stock Exchange

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PREFACE

The volumes of the International Library of Technology are made up of Instruction Papers, or Sections, comprising the various courses of instruction for students of the International Correspondence Schools. The original manuscripts are prepared by persons thoroughly qualified both technically and by experience to write with authority, and in many cases they are regularly employed elsewhere in practical work as experts. The manuscripts are then carefully edited to make them suitable for correspondence instruction. The Instruction Papers are written clearly and in the simplest language possible, so as to make them readily understood by all students. Necessary technical expressions are clearly explained when introduced.

The great majority of our students wish to prepare themselves for advancement in their vocations or to qualify for more congenial occupations. Usually they are employed and able to devote only a few hours a day to study. Therefore every effort must be made to give them practical and accurate information in clear and concise form and to make this information include all of the essentials but none of the non-essentials. To make the text clear, illustrations are used freely. These illustrations are especially made by our own Illustrating Department in order to adapt them fully to the requirements of the text.

In the table of contents that immediately follows are given the titles of the Sections included in this volume, and under each title are listed the main topics discussed.

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CONTENTS

NOTE.—This volume is made up of a number of separate Sections, the page numbers of which usually begin with 1. To enable the reader to distinguish between the different Sections, each one is designated by a number preceded by a Section mark (§), which appears at the top of each page, opposite the page number. In this list of contents, the Section number is given following the title of the Section, and under each title appears a full synopsis of the subjects treated. This table of contents will enable the reader to find readily any topic covered.

OPERATING ON THE NEW YORK STOCK EXCHANGE—(*Continued*)

STOCK-BROKERAGE ACCOUNTING METHODS, § 38

THEORY OF ACCOUNTS

(PART 1)

ACCOUNTANCY TERMS

GENERAL DISCUSSION OF ACCOUNTANCY

1. Accountancy, or *accounting,* is the work or art of recording, classifying, comparing, and scientifically analyzing business transactions and accounts. It comprehends the arrangement of accountancy systems in such a way as to exhibit the correlated facts, details, results, and true conditions of any business and the exhibition thereof in terms that will provide the management of a concern with such information as is necessary for successful administration. Accountancy is much more comprehensive than bookkeeping and auditing. In fact, it includes both of these branches of cost keeping as well as system building and investigations, just as much as mathematics embraces such subjects as algebra, geometry, and arithmetic. Bookkeeping is simply the art of recording business transactions in a regular and systematic manner according to some prearranged scheme, or plan; and auditing consists merely in making an examination of the accounts, vouchers, records, and statements of a business to determine whether or not the books have been kept properly and accurately, the principal object being to assure the proprietor of a concern that the books are correct, as well to prevent or to detect errors or defalcations.

2. The accountant's work is different from either the bookkeeper's or the auditor's. The bookkeeper's work is mainly clerical, being performed usually according to routine. The

auditor's duties are to oversee. He must verify the work of the bookkeeper and see that the books are kept correctly; also, he must see that the accounts contain no errors of omission or commission, nor of a clerical nature, as well as see that the assets, liabilities, and capital as set forth in the balance sheet are correctly stated and that the income and expenditures are correct and according to the books.

The accountant's work is creative, analytical, and exhaustive. He must be able to devise systems of record and account that will give the greatest amount of detailed information regarding any particular business that he is called upon to systematize, and must do this with the smallest possible expenditure of labor and time. He must necessarily be quick to comprehend; his varied career and diversified work necessitate ability, foresight, persistence, and patience. Indeed, the work of the accountant brings him in touch with all lines of business activity and he therefore soon comes to have a clear knowledge of business, finance, banking, and manufacturing. It is not sufficient that he should know something of a manufacturing establishment and its accounting system, but he should be familiar with the nature of the work done therein and the processes through which the article must go before it becomes the finished product. The broader his general knowledge, the more successful will he be as an accountant and system builder. Although some accountants specialize in certain lines, such as factory systems, banking, transportation, etc., the majority of accountants prefer to accept appointments in any line of activity, thus necessitating a broad knowledge of affairs. He is frequently called on to make audits and to conduct special examinations for the purpose of detecting alleged fraud, or to make reports to intending purchasers, etc. All this goes to show how broad and far-reaching the accounting profession is.

The accountant, the bookkeeper, and the auditor may be likened to the doctor, the patient, and the nurse. The accountant (doctor) arranges the books and prescribes what is to be done, the bookkeeper (patient) follows the prescription keeping the records, while the auditor (nurse) sees that those records are kept correctly and that the accountant's orders are carried

out. If the orders are not carried out, it may be necessary to consult the accountant again. The accountant must necessarily have been a bookkeeper, and usually is an auditor as well; but the auditor is not always an accountant. This may be due to the fact that the office he fills requires special duties only for which he is qualified, in other words, it is limited to the verification of records.

DEFINITION AND CLASSIFICATION OF ACCOUNTS AND ACCOUNTANCY TERMS

3. An **account** is an itemized record of debits and credits under one heading in a ledger. All items affecting any particular account are contained under that heading. It is a picture of a particular phase of the business.

4. The accounts of any business are divided into two general classes, namely, *real accounts* and *nominal accounts.* **Real accounts** are those which represent assets (resources) and liabilities, such as personal accounts, property accounts, securities, and written obligations receivable and payable. **Nominal accounts** are those which represent gains and losses (income and expenditure) of a business, as sales and other income, salaries, expenses, rents, interest, etc. All accounts belonging to this class are closed at stated periods into the profit-and-loss account. Some accountants make three divisions of accounts, consisting of *capital accounts, real accounts,* and *nominal accounts,* on the ground that the capital accounts do not constitute a liability and that they represent only the proprietary interest in the business.

Although it is true that the terms real and nominal do not seem clear as to meaning, yet they are generally in use and are therefore considered authoritative. The real accounts are known also as the *balance-sheet,* or *financial, accounts;* and the nominal accounts are known as the *business,* or *revenue, accounts,* and as the *profit-and-loss accounts.*

Business transactions that affect nominal accounts, such as the sale of goods or the payment of rent, produce either a profit or a loss and thereby indirectly cause a corresponding increase

or decrease in capital. Entries affecting only the real accounts (for instance the payment of a note or a debt) do not change the revenue or the capital in any way. The payment of a debt by a firm, for example, reduces both assets and liabilities to the same extent, while a payment to the firm simply changes the nature of an asset by substituting cash for a promise.

The accompanying diagram shows the classification of ledger accounts.

Classification of Ledger Accounts

Ledger accounts	Balance-sheet accounts	Assets	Fixed Current Prepaid charges	Debits
		Liabilities	Fixed Current Reserves	Credits
		Capital	Corporation: Capital stock surplus, etc. Partnership: Capital accounts	
	Profit-and-loss accounts	Revenue on earnings accounts	Sales Interest earned Dividends earned Other income	Credits
		Operating and expense accounts	Purchases Freight charges Manufacturing costs Trading expenses Salaries General expenses Administrative expenses	Debits

5. Personal accounts are all accounts with individuals, firms, or corporations; **impersonal accounts** are all accounts other than personal, such as property, income, expenses, etc. Included under personal accounts are the following:

Accounts receivable, or accounts due from customers, debtors to whom goods have been sold. They include the aggregate of outstanding accounts receivable standing on the books at any time. These are often, though wrongly, called sundry debtors.

Accounts payable, which include all accounts due to creditors from whom goods are purchased; often, though wrongly, called sundry creditors.

Sundry debtors, which include accounts due from debtors other than merchandise customers, as advances to officers and employes on account of salary, expenses in hands of travelers unaccounted for, and other debit accounts not strictly accounts receivable. These accounts should be kept in the concluding part of the general or private ledger, either in separate accounts or in one general account headed Sundry Debtors.

Sundry creditors, the opposite of sundry debtors, may include also creditors from whom we purchase various properties other than goods, as furniture, advertising, contracts, and expense bills of various kinds. If such bills are numerous, they may have a separate ledger, but since they are usually only temporary they should be handled as explained under sundry debtors. Sometimes, however, they are not entered on the books until paid for in cash.

6. Negative accounts are accounts that are directly the opposite, or negative, of other accounts. The withdrawals of the proprietor are negative to his capital account; and, in a like manner, returned goods are negative to sales, as they tend to reduce the amount sold. Reserves are negatives to property accounts.

7. Mutual accounts are accounts kept between firms, each of which both buys from and sells to the other, thereby necessitating accounts in both sales and purchase ledgers.

8. Current, or **running, accounts** contain a series of debits and credits and are adjusted or settled at intervals. They are the opposite of transient accounts, as they record the continuous dealings of customers with the corresponding credits, etc.

9. The **capital account** represents the net amount that the proprietor has invested in the business. It is sometimes known as his investment account or even as his stock account. When two or more persons are interested in the business, a

capital account, as well as a private account, should be opened for each. The capital of the proprietor may be determined by deducting the total liabilities owing to the public from the total assets. The capital of a corporation is known as *capital stock.*

10. The **proprietor's private account** contains all withdrawals made by the proprietor, and it may also contain any credits that occur, such as salary, interest on investment, etc. This account may also be credited with the net profits of the business, or charged with the net loss. When this plan is followed, the private account shows the amount due to or from the proprietor and subject to his disposition, while the investment account remains intact and exhibits at all times his investment in the business. The investment account may be increased when desired by additional investments, or by carrying to it all or part of the profits from the private account. It is known also as a *drawing account* and as a *personal account.*

11. The **suspense account** contains record of items held in abeyance for the want of further information. For instance, cash received through the mails without containing the name of the sender would be credited to the suspense account until sufficient information could be obtained for its proper disposition. It is sometimes used for exhibiting doubtful accounts, for over and shortage of cash, etc. In case the cash account is subject to fluctuations by excesses or shortages, such fluctuations are adjusted into an account called *over and short,* or *excess and deficiency.* All such suspended items not accounted for after a reasonable length of time should be closed off into the profit-and-loss account.

12. The **adjustment account** is an account used simply as an intermediary through which accounts are made, as accruals of interest and other items. The profit-and-loss account might even be considered an adjustment account, since it is opened for the purpose of adjusting the profits and losses, and after these adjustments are made its function ceases.

13. As the cash-book balance is the amount taken into the trial balance to complete the equilibrium of the ledger, the cash

book is obviously considered a part of the ledger and is therefore the real **cash account.** Sometimes a cash account or bank account is opened in the general ledger and the totals of the debit and credit sides of the cash book posted thereto each month or at such times as the books are closed and statements prepared. Following this practice makes the general ledger a complete summary of business transactions.

14. The term **invoice** should be used for the lists, or bills, of goods bought; the term **bills** for lists of those sold.

15. **Cash** includes money, checks, bank drafts, postal and express money orders, and, in fact, any paper than can readily be converted into money.

16. The **working capital** is that part of the net capital of an undertaking which is available for the working of such undertaking; properly speaking, it is the liquid, or current, assets, that is, the part of the capital used in the active operation of the business. It may consist of: Cash derived from the sale of capital stock; cash derived from the sale of treasury stock; proceeds of sale of bonds; loans; accounts receivable; merchandise, etc.

SINGLE- AND DOUBLE-ENTRY ACCOUNT KEEPING COMPARED

17. When credit became an important factor in commercial intercourse, the necessity arose for recording credit transactions in a manner which would enable a merchant to determine readily the amounts to be received or paid by him. The necessity was met by the introduction of single-entry account-keeping, which, from its earliest stages, has undergone refinements that closely approach the requirements of double entry.

All single-entry methods are based upon the principle of exhibiting the details of personal accounts. The details of property accounts may also be exhibited, but the details of representative, or nominal accounts, are not exhibited, hence the term *single entry*.

18. The fundamental difference between single and double entry is: Single entry should account for the assets and liabilities of a business. The profit or loss of the business is, therefore, determined from the change that has taken place in the amount of the net assets, period by period.

Double-entry accounts for the assets and liabilities of a business, and it also accounts for the changes which have taken place in the amount of the net assets, period by period.

1922					
Jan.	1	Evans Williams commenced business with a cash capital of			$25,000.00
Jan.	5	He purchased, for cash:			
		A store building		$ 6,500.00	
		The lot		2,500.00	
		Furniture and fixtures		1,250.00	
Accounts Receivable:					
		Johnson & Co.	$ 60.50		
		A. J. Adams	75.80		
		R. Klein	110.20		
		J. Fitch	32.40		
		W. Evans	19.45	298.35	
		Merchandise		12,750.00	23,298.35

His other transactions during the three months were:

		Cash sales		$50,000.00	
Credit Sales:					
Jan.	10	Johnson & Co.	$270.20		
Jan.	20	A. J. Adams	178.40		
Feb.	16	R. Klein	320.80		
Mar.	8	J. Fitch	122.22		
Mar.	18	W. Evans	64.40		
Mar.	21	Thompson & Co.	814.10		
Mar.	28	J. F. Wilkinson	1,050.00		
		Total credit sales		2,820.12	
		Total sales			$52,820.12

Fig. 1

When accounts are kept by single-entry methods, and information is required as to the causes for changes in the amount of net assets, period by period, it becomes necessary to obtain the information from the best sources available. These vary from

an orderly record (daybook or blotter) which presents a memorandum record of all transactions, to an incomplete system of noting some transactions, and failing to note others. In actual practice the financial condition of a business, represented by a single-entry method of account-keeping, is usually determined from the status of the assets and liabilities at the commencement and the end of the period for which a financial statement may be required.

For merchandise purchased on credit:				
Feb.	8	Henry & Co.	$ 3,120.60	
Feb.	22	Forbes & Co.	6,420.60	
Mar.	2	A. Jansen	575.50	
Mar.	8	Roberts & Co.	25,160.20	$35,276.90
For equipment—Cash:				
Jan.	5	Horse and wagon	$ 375.00	
Jan.	5	Auto truck	2,000.00	$2,375.00
Cash payments, on accounts payable:				
Mar.	8	Henry & Co. on account	$ 1,500.00	
Mar.	22	Forbes & Co. on account	3,000.00	
Mar.	31	Roberts & Co. on account	15,000.00	$19,500.00
Cash payments for expenses:				
		Salaries and wages	$ 1,200.00	
		Sundry supplies	320.50	
		Telephone and telegrams	30.75	
		Light and heat	20.50	
		Freight and charges outward	240.80	$1,812.55
Cash receipts, during the period, from credit sales were:				
Feb.	10	Johnson & Co. on account	$ 200.00	
Feb.	20	A. J. Adams on account	50.00	
Mar.	10	R. Klein	311.18	
		Full settlement of charge Feb. 16—Discount $9.62		
Mar.	25	Fitch & Co. on account	20.00	$581.18

Fig. 2

19. On the other hand, account-keeping by double entry provides information which may be analyzed and classified to any desired extent upon the ledger, respecting financial conditions which have resulted in a profit or a loss.

Although single-entry methods are infrequently used, it is necessary to understand the variations between single- and double-entry methods, when the former are encountered.

The following illustration will suffice to show financial results from a business for which single-entry account-keeping was employed, in a more or less usual state of irregularity.

20. Irregular Single-Entry Illustrated.—The transactions shown in Figs. 1, 2, and 3 are assumed to cover a period of 3 months, from January 1, 1922, to March 31, 1922, a financial statement being required at the latter date.

Expenditures during the period were as shown in Fig. 2.

Inventories taken at March 31, 1922, showed the valuations as given in Fig. 3.

Value of the lot, at cost		$2,500.00
Store building, cost value	$6,500.00	
Less depreciation, rate of 5 per cent. per annum	81.25	6,418.75
Furniture and fixtures, cost	$1,250.00	
Less depreciation, rate of 10 per cent. per anum	31.25	$1,218.75
Horse and wagon, cost	$375.00	
Less depreciation, rate of 10 per cent. per annum	9.38	$365.42
Auto truck, cost	$2,000.00	
Less depreciation, rate of 15 per cent. per annum	75.00	$1,925.00
Merchandise, at cost—cost being below market at March 31, 1922		9,520.16

Fig. 3

It is assumed that the given transactions have been accounted for as shown in the Cash Book, Fig. 4. The check marks (√) indicate that the amounts have been posted to ledger accounts, as shown in the pages that follow.

CASH BOOK

CASH

1922	Particulars	√	Dr.	1922	Particulars	√	Cr.
Jan. 1	Evans Williams, capital	√	$25,000.00	Jan. 5	Lot purchased	√	$2,500.00
Various	Cash sales, 1/5 to 3/31		50,000.00		Store building purchased	√	6,500.00
Feb. 10	Johnson & Co., on account	√	200.00		Furniture and fixtures purchased	√	1,250.00
Feb. 20	A. J. Adams, on account	√	50.00		Johnson & Co. Purchase of account	√	60.50
Mar. 10	R. Klein, in full for invoice 2/16	√	311.18		A. J. Adams Purchase of account	√	75.80
25	Fitch & Co., on account	√	20.00		R. Klein Purchase of account	√	110.20
					J. Fitch Purchase of account	√	32.40
					W. Evans Purchase of account	√	19.45
					Merchandise, Stock purchased	√	12,750.00
					Horse and wagon purchased	√	375.00
					Auto truck purchased	√	2,000.00
				Various	Salaries and wages		1,200.00
				"	Sundry supplies		320.50
				"	Telephone and telegrams		30.75
				"	Light and heat		20.50
				"	Freight and charges		240.80
				Mar. 8	Henry & Co. on account	√	1,500.00
				22	Forbes & Co. on account	√	3,000.00
				31	Roberts & Co. on account	√	15,000.00
				31	Evans Williams, Drawn	√	3,000.00
				31	Balance down		25,595.28
			$75,581.18				$75,581.18
Mar. 31	Balance brought down		$25,595.28				

FIG. 4

LEDGER

Evans Williams Capital Account

1922			√	Dr.	1922			√	Cr.
					Jan.	1	Cash	√	$25,000.00

Johnson & Co.

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, purchase of a/c	√	$60.50	Feb.	10	Cash, on a/c	√	$200.00
	10	Mdse. Sales	√	270.20					

A. J. Adams

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, purchase of a/c	√	$75.80	Feb.	20	Cash, on a/c	√	$50.00
	20	Mdse. Sales	√	178.40					

R. KLINE

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, purchase of a/c	√	$110.20	Mch.	10	Cash & Discount in full for charge Feb. 16	√	$320.80
Feb.	16	Mdse. Sales	√	320.80					

J. FITCH

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, purchase of a/c	√	$32.40	Mch.	25	Cash on a/c	√	$20.00
Mch.	8	Mdse. Sales	√	122.22					

W. EVANS

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, purchase of a/c	√	$19.45					
Mch.	18	Mdse. Sales	√	64.40					

THOMPSON & CO.

1922			√	Dr.	1922			√	Cr.
Mch.	21	Mdse. Sales	√	$814.10					

J. F. WILKINSON

1922			√	Dr.	1922			√	Cr.
Mch.	28	Mdse. Sales	√	$1,050.00					

HENRY & CO.

1922			√	Dr.	1922			√	Cr.
Mch.	8	Cash on a/c	√	$1,500.00	Feb.	8	Mdse.—purchases	√	$3,120.60

FORBES & CO.

1922			√	Dr.	1922			√	Cr.
Mch.	22	Cash on a/c	√	$3,000.00	Feb.	22	Mdse. purchases	√	$6,420.60

A. JENSEN

1922			√	Dr.	1922			√	Cr.
					Mch.	2	Mdse. purchases	√	$575.50

ROBERTS & CO.

1922			√	Dr.	1922			√	Cr.
Mch.	31	Cash, on account	√	$15,000.00	Mch.	8	Mdse. purchases	√	$25,160.20

Lot—Store Building

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, paid for lot	√	$2,500.00					

Building—Store

1922				Dr.	1922			√	Cr.
Jan.	5	Cash, paid for building	√	$6,500.00	Mch.	31	Depreciation		$81.25

Furniture and Fixtures

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, paid for Furniture and Fixtures	√	$1,250.00	Mch.	31	Depreciation		$31.25

Horse and Wagon

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, purchased	√	$375.00	Mch.	31	Depreciation	√	$9.38

Auto Truck

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, purchased	√	$2,000.00	Mch.	31	Depreciation	√	$75.00

Merchandise Purchases

1922			√	Dr.	1922			√	Cr.
Jan.	5	Cash, purchased	√	$12,750.00					

Evans Williams—Drawing Account

1922			√	Dr.	1922			√	Cr.
Mch.	31	Cash	√	$3,000.00					

The balances shown upon the ledger then cover the personal accounts—the principal object of single entry, the property accounts, and the first purchase of merchandise.

The balances are as shown in Fig. 5.

21. As the ledger balances now stand, a financial statement, at March 31, 1922, could not be prepared therefrom. The cash

	Dr.	Cr.
Evans Williams, capital		$25,000.00
Johnson & Co.	$ 130.70	
A. J. Adams	204.20	
R. Klein	110.20	
J. Fitch	134.62	
W. Evans	83.85	
Thompson & Co.	814.10	
J. F. Wilkinson	1,050.00	
Total of accounts receivable	$2,527.67	
Henry & Co.		$1,620.60
Forbes & Co.		3,420.60
A. Jansen		575.50
Roberts & Co.		10,160.20
Total of accounts payable		$15,776.90
Lot	$ 2,500.00	
Building—Store	6,418.75	
Furniture and fixtures	1,218.75	
Horse and wagon	365.62	
Auto truck	1,925.00	
Total of property accounts	$12,428.12	
Merchandise (first purchase)	$12,750.00	
Evans Williams—Drawing account	$ 3,000.00	

Fig. 5

account is not upon the ledger. This, however, is not absolutely essential—though preferable—for the preparation of a financial statement. The cash book is often treated as an integral part of the ledger; therefore, when not represented upon the ledger, the cash balance is entered upon a trial balance and in a financial

statement, as if it were upon the ledger. The nominal accounts are not upon the ledger—the distinguishing feature of single entry—therefore (assuming nominal transactions to have been much more numerous, and entered more irregularly than are those given in the illustration), the financial condition of the business, at March 31, 1922, could be ascertained only by one of the two following methods:

1. Ascertain the net difference between the assets and liabilities, as they stood at the commencement and end of the period. If the net assets at commencement show an increase at the end

		Assets	Liabilities
Accounts receivable		$ 2,527.67	
Accounts payable			$15,776 90
Property accounts		12,428.12	
Evans Williams			
Capital on account	$25,000.00		
Drawing on account	3,000.00		22,000.00
Total upon ledger		$14,955.79	$37,776.90
Add			
Balance of cash book		25,595.28	
Merchandise inventory, at March 31, 1922		9,520.16	
Balance, being net profit for the three months ended March 31, 1922			12,294.33
		$50,071.23	$50,071.23

Fig. 6

of the period, or the net liabilities at commencement show a decrease, the difference is profit for the period. In proceeding upon this basis, any additional capital invested in the business during the period is to be accounted for as a liability at the end of the period. Conversely, any capital withdrawn, during the period, is to be accounted for as an asset, at the end of the period.

2. Write up the nominal accounts, thereby changing the single entry into double entry.

It must be understood that if profits or losses are determined by Method 1, and the proprietor of the business drew amounts for his personal use during the period which do not appear upon

the ledger, as is often the case, the total of such drawings must be added to profits, or deducted from losses, in order to arrive at a true profit-and-loss statement.

The assets and liabilities shown in the list of ledger balances, Fig. 5, and the cash book are accounted for in Fig. 6.

Sales			$52,820.12
Cost of sales:			
Merchandise inventory, January 5		$12,750.00	
Merchandise purchases		35,276.90	
Deduct		$48,026.90	
Merchandise inventory March 31		9,520.16	
Cost of sales			38,506.74
Gross profit			$14,313.38
Expenses (not on ledger):			
Salaries and wages		$1,200.00	
Sundry supplies		320.50	
Telephone and telegrams		30.75	
Light and heat		20.50	
Freight and charges outward		240.80	
Discount (allowed to R. Kline)		9.62	
Depreciation			
On store building	$81.25		
On furniture and fixtures	31.25		
On horse and wagon	9.38		
On auto truck	75.00	196.88	
Total expenses			2,019.05
Net profit for the period			$12,294.33

Fig. 7

The results shown in Fig. 6 may be proved by Method 2 as shown in Fig. 7.

22. The procedure necessary for adjusting the ledger accounts to conform with the principles of double entry, is quite obvious. The illustration is not intended as a lesson in account-keeping. Its object is to show how single-entry accounts must be dealt with, in order to arrive at a statement of results.

FORMS OF ACCOUNTS

THE LEDGER AND ITS FUNCTIONS

KINDS OF LEDGER

23. The **ledger** is the book of accounts, and all the other books converge or feed into it. It contains the various accounts of the business in which are summarized the results of all the business transactions. Whether or not the accounts should contain many details, depends largely on the ideas of the bookkeeper and on the accounting system installed. In earlier days, the accounts of customers, for instance, contained the details of all sales and credits. In this respect it was practically a book of original entry without any other record than perhaps a day book or a blotter that contained a lead-pencil or a pen-and-ink record of orders when taken. The ledger of today, however, is scientifically arranged and contains only such data as are necessary in making summaries and in providing information pertaining to the business. By means of page references, full details may be obtained at any moment by consulting the books of original entry. The ledger, as now known, is a gradual evolution from the form originally used.

It is not the intention here to discuss bookkeeping principles and the ledger with its various accounts, but rather to discuss the practices now in use. In this connection are described the various kinds of ledgers, the subdivisions of ledgers, and the various ways in which ledgers are ruled.

24. The **bound ledger** has been in use for centuries and is still used in almost every business office. Its advantage lies in the fact that leaves cannot be removed and that everything placed therein becomes a permanent record. Its disadvantage lies in the fact that "deadwood," or closed accounts, cannot be

removed as in the case of a loose-leaf ledger, thereby rendering the ledger unwieldy. Of course, if the ledger is properly divided, as it should be, this disadvantage is reduced to a minimum, because the index is usually referred to when any particular account is needed. Even with its additional accounts, however, it is not so clumsy as the average loose-leaf ledger. When opening the ledger, sufficient space should be left to accommodate the various accounts for 1, 2, or more years, according to the length of time it is to be used. The modern ledger contains, as a rule, only the general accounts of the business and, therefore, need not be large. The fact that it contains only live accounts, the most important accounts of the business, is strong reason for having a bound book. The index may be contained in the first few pages of the ledger or in a separate index, or the ledger may be self-indexing. Since the accounts are few, however, the bookkeeper will find it to his advantage to memorize the pages, at least those which are used most. A good plan is to have on the desk for ready reference a card giving the pages of the various ledger accounts, especially of those which are most active.

25. The **loose-leaf ledger** of today is a familiar device. It is so arranged that the leaves when filled, or when the account becomes closed or obsolete, may be removed and placed in a separate binder. The chief advantage of this style of ledger lies in the fact that only live accounts are contained therein, and that unnecessary leaves are excluded. The ledger is usually locked, and leaves can be placed therein or removed simply by unlocking and releasing the tension at the back of the binder. The key is usually kept by the head bookkeeper. Of course, there are various kinds of locks and binders, and various sizes of sheets, to meet the requirements of different lines of business. The loose-leaf ledger is usually divided alphabetically so that names may be found in their respective locations. Twenty-six index leaves are generally used, one being placed before each letter of the alphabet on which the ledger names are placed. Sometimes the index sheets are omitted, in which case the ledger is self-indexing. Any name

can be readily located by means of the thumb tabs showing the letters and the vowels under which the respective names should be placed.

26. The **loose-sheet ledger** has come into use in recent years and has become quite popular, especially for small retail accounts. A carbon copy of each time sale is made, usually on the typewriter, and placed in a binder or file under the customer's name. It will be seen that his account consists entirely of loose sheets, and as each charge is paid, the sheet or sheets can be removed and placed in a transfer binder. The original, of course, is given or mailed to the customer at the time the sale is made. The amount due from each person may be totaled on the last sheet placed in the file, or a summary may be contained on a separate sheet kept for that purpose. The sheets are filed away under the name or the number of the customer and can be referred to readily. They may be kept together in the binder under the respective letters, or else placed in a folder and filed in a regular filing case in the same manner as the regular correspondence. This plan of account keeping has been found advantageous in many cases where small sales are made, and, as it eliminates all copying and intermediate records, the probability of error is reduced to a minimum. It might even be more simplified by adopting the plan suggested in connection with the bill-and-change-form ledger, which is described later. The sales for the day may be summarized on a separate sheet or on the adding machine, and the aggregate credited to the sales account, with a corresponding charge to a controlling account for customers in the general ledger. If desired, this plan of ledger may be maintained only for small sales and such accounts retained entirely as an auxiliary record until payment is made, at which time these payments may be entered in the sales for the day.

Sometimes customers' accounts are filed according to number, in which case separate index cards or loose sheets are required. The index card or book gives the name, address, and number of each customer. All sales to him are therefore recorded according to the number given and can be referred to readily.

27. The **card ledger** has become exceedingly popular. Cards are used exclusively, but in the same manner as the leaves of a ledger. They are ruled the same as ledger accounts, both front and back, and are placed in alphabetical order in a cabinet or tray. These cards constitute the ledger and can be conveniently divided in any way desired—alphabetically, numerically, or geographically. The size of the cards may be large or small, to suit conditions and to accommodate the number of details to be placed thereon. The stock size is 3 in. × 5 in. Use may be made of the regular ledger ruling or of rulings designed to meet special cases. When an entry is to be made, the card is removed from the file, and afterwards returned to its place. Closed and inactive accounts should be removed therefrom and placed in a separate tray, keeping only current or live accounts in the main files. Care must be taken to see that the cards are placed where they belong after entries are made on them. Some bookkeepers finish all postings before replacing any of the cards in the files. When this is done, a summary or a proof of all entries can be made to determine whether or not they agree with the total sales and credits for the day. This is a commendable plan.

28. The **tabular ledger** is a columnar ledger or book for the keeping of accounts that must be dissected or divided into their component parts. The customers' names are placed in a margin at the left-hand side of the page, leaving one, two, or three lines for each name and address, while the items of charge are distributed into the various columns. The columns are headed with each class of items requiring to be credited. It will be seen, then, that a debit is made to the customer and a credit to the accounts represented by the column headings. A total column is used at some convenient place on the page, and it is obvious that the aggregate of all distributive columns should equal the total column. This form of ledger is especially well adapted to keeping accounts of water, light, and telephone companies, and to many other lines of business where great divisions are necessary. It has been applied to advantage in building-and-loan associations, hotels, real-estate offices, etc.

It is a very good form for the use of professional men. The daily-balance ledger is a form of tabular ledger, as is also the expense-analysis sheet, both of which are explained later. Sometimes the customers' names are placed at the top of columns and the constituent items, in the left-hand margin. The book may be bound or loose leaf.

SUBDIVISION OF LEDGERS

29. In a business of moderate size, all the transactions may be recorded in a simple set of books in which one ledger is used to contain all the accounts involved, and from which the trial balance is taken at desired intervals. In almost every large business, however, it is found advisable to subdivide the various books in order that clerks and bookkeepers may perform the duties assigned to them without interfering with the work of one another. In carrying out this plan of division, it becomes necessary to subdivide the ledger into two or more parts because of the great number of transactions that have to be recorded. This division permits of posting being done by two or more ledger keepers where the work has been found too heavy for one. The most general divisions of the ledger are as follows:

1. *Sales ledger,* containing the personal accounts of customers. This ledger may be bound, loose-leaf, or card, according to the plan desired, but the manner of handling it is the same in each case. It is known also as the debit ledger, the customers' ledger, and the accounts-receivable ledger.

2. *Purchase ledger,* containing the personal accounts of creditors, the persons from whom goods are purchased. Like the sales ledger, this ledger may be bound, loose-leaf, or card. It is known also as the credit ledger and the accounts-payable ledger and for importers as the foreign ledger.

3. *Expense ledger,* containing the various expense accounts of the business. By the use of this special ledger the various expenses can be subdivided into their component parts more readily than is possible with the general ledger.

4. *General ledger,* containing all the main or general accounts of the business. It may be bound, loose-leaf, or card, as desired,

but in most cases it is thought best to use a bound ledger for the general accounts. This ledger contains the controlling accounts* with the various subordinate ledgers and is therefore self-balancing.

30. Sometimes the ledgers just mentioned are still further divided. For instance, instead of one sales ledger there might be a city sales ledger and a country sales ledger, or a number of ledgers arranged according to the letters of the alphabet, as sales ledger A to L and sales ledger M to Z. The purchase ledger might be divided similarly. Special ledgers may be kept for branch offices also, or if desired for private accounts; that is, those accounts pertaining to capital, plant, and revenue which are to be kept from the scrutiny of the bookkeepers. The special ledgers have different names, as auxiliary ledger, special ledger, subordinate ledger, separate ledger, side ledger, etc.

31. The **general ledger,** sometimes called the *private ledger,* is usually kept by the head bookkeeper, while the various subordinate ledgers are kept by assistants and made to harmonize with the general ledger from time to time; that is, daily, weekly, or monthly. The total sales, purchases, expenses, credits to customers by cash or otherwise, and debits to creditors of cash or notes, are obtained from the respective books by the head bookkeeper himself, from which books he makes entries to the general ledger accounts, or they are reported to him in writing from time to time by his assistants, from which reports he makes the required entries. In any case, his ledger is made to show the transactions of the business in totals, while the details are recorded in the separate ledgers. When the general ledger itself requires more attention than the head bookkeeper can give to it, a further division is made and this ledger is known as the private ledger. In this case, controlling accounts are kept also between these ledgers, the same as between the general ledger and the subordinate ledgers. The private ledger may be kept by the senior bookkeeper or by one of the proprietors.

* Definition given and operation of controlling accounts explained in another Section.

32. The private ledger contains such accounts as the proprietors desire to keep from the knowledge of the bookkeepers and other employes. It usually includes the accounts necessary to determine the earnings of the business and its financial condition, but the accounts to be selected depend on the ideas of the proprietor. The accounts usually included are the capital accounts, investments, loans, profit and loss, reserves, surplus, etc. Sometimes it includes the salary accounts of officers or partners and whatever other nominal accounts are to be kept private.

33. When a private ledger is used it obviously contains a limited number of the general accounts, while the remaining accounts are kept in the general ledger. It will be seen, then, that a division is made into two main ledgers, one known as the general ledger and the other as the private ledger. Each of these, in turn, has a controlling account with the other, and each controlling account will have the same amount as the other. In the private ledger there is a "general-ledger controlling account," and in the general ledger there is a "private-ledger controlling account." The other controlling accounts for the subordinate ledgers are contained in the general ledger, which ledger contains also the remaining real and nominal accounts that are not in the private ledger. The general ledger in this case is the "key" ledger. When a private ledger is referred to, however, it does not always mean that it is a division of the general ledger. When the ledgers are subdivided, it is necessary to have appropriate columns in the cash book and journal in order to care for accounts that occur with sufficient frequency.

Sometimes a private journal is used in connection with the private ledger, in which the entries pertaining thereto are recorded; but it is obvious that amounts placed in the private ledger must also have a corresponding entry in the general-ledger controlling account in order that the ledgers may be kept in harmony. The general ledger is sometimes called the *balance ledger* in contradistinction to the private ledger, because it contains controlling accounts and balances.

34. To illustrate how the general- and private-ledger controlling accounts operate, assume that the cash account is kept in the general ledger and the proprietor's salary account in the private ledger. When a check is drawn for $500 for the proprietor's salary, the entry shown in Fig. 8 is made in the general ledger through the cash book.

Private ledger account	500	
Cash		500

Fig. 8

At the same time in the private ledger another entry, Fig. 9, is made through the journal.

Proprietor's salary account	500	
General ledger account		500

Fig. 9

35. Through this operation both ledgers are kept in balance, the total in the general-ledger account in the private ledger exactly balancing the total of the private-ledger account in the general ledger.

36. Although it is true that the subdivision of ledgers may be carried to excess in some cases, on the other hand it has many advantages in a large institution where the work is heavy and the employment of many assistant bookkeepers is necessary. Some of the other special ledgers most commonly used are as follows:

1. *Branch-office ledger,* containing separate accounts with the various branches maintained by the institution.

2. *Agents' ledger,* containing accounts with the various agents.

3. *Consignment ledger,* containing accounts with the various commission merchants or agents to whom goods are consigned for sale on commission. A special ledger may also be kept for consignments received to be sold for others.

4. *Bill books,* containing details of notes and acceptances received and given.

5. *Real-estate ledger,* containing accounts with the various holdings of real estate; that is, building, ground, etc.

6. *Investment ledger,* containing details of the various investments in stocks, bonds, mortgages, commercial paper, etc.

7. *Contract ledger,* containing accounts and details of the various contracts being conducted by contractors, builders, etc.

8. *Cost ledger,* showing the accounts and details of the various jobs in the cost department of a manufacturing establishment.

9. *Material ledger,* showing the accounts and details of the various kinds of material and stock held by a manufacturing concern.

10. *Advertising ledger,* containing accounts of the various kinds of advertising being carried in periodicals, papers, etc. This ledger may also include accounts of the various agencies through whom advertising is placed.

11. *Stockholders' ledger,* containing accounts of the various stockholders of a corporation.

37. In some cases, two or more of the various ledgers just mentioned are included in one. In a small business where the subdivision of the ledger is required and the accounts are not numerous enough to justify the opening of a special ledger, a common plan is to divide the general ledger into two or three parts. Under this plan, the accounts of customers can be placed in the back part of the book, and the accounts with creditors preceding them in the center of the ledger, while all the general accounts can be placed in the first part of the book with or without controlling accounts, to represent the subdivisions. Although the ledger may be divided into several parts, the final results remain unchanged, as at any time the sum of all the debits will equal the sum of all the credits if the posting has been correctly done, and exactly the same trial-balance results will be obtained as if all the accounts had been kept in one ledger instead of in several. But if the books should prove to be out of balance it is desirable to determine at once which ledger is wrong; this can readily be done by keeping controlling accounts in the different ledgers by means of which each ledger keeper is able to prove the accuracy of his own work by taking off an independent trial balance.

LEDGER RULINGS

38. As there are several forms of ledger accounts in use, the **rulings** are usually made to suit the convenience of the business. Sometimes the account contains considerable data for the identification of each entry, and, again, it contains only a reference to the source from which each item is posted. In earlier days, nearly all the details of each sale were placed in the customer's account, but this plan does not now prevail in business offices; yet it is sometimes advisable, especially in customers' accounts, to show supporting data for entries made. This plan frequently saves the trouble and time of referring back to the original entries. The use of figures, letters, or

(Name of Account)

(Complete Address)

DR. CR.

Date		Items	Folio	Amount	Date		Items	Folio	Amount

FIG. 10

symbols is not uncommon in briefing information in the ledger accounts. The ledger-account forms and rulings that follow are suggestive, and can be modified to meet the needs of any establishment. They can be used in bound, card, or loose-leaf ledgers.

39. Regular Form.—The regular ledger form, as shown in Fig. 10, has been in common use for a great length of time and serves its purpose well. It is evidently the most popular, judging from its extensive use.

40. Money Columns in Center of Page.—The form of ruling shown in Fig. 11 has an advantage over the regular form in that the amounts are close together and can be readily compared. One ruling serves for both columns. If desired, a balance column may be placed between the two amount columns.

41. Balance Column.—The form shown in Fig. 12 illustrates the manner of handling the balance column. It may contain at all times the balance due from or to the individual. Not infrequently, however, it is used only at the end of the month, as the attempt at making new extensions every time an entry is made involves extra work. Frequently the balance column contains only lead-pencil figures. Sometimes there are two balance columns, debits and credits, but these seem unnecessary, because the nature of the account indicates whether it is a debit or a credit. In the case of accounts receivable, all balances are presumably debits, and an opposite showing is usually indicated by writing the amount in red ink or by putting a ring around it. A like procedure is applicable to accounts payable also. The balance column may be placed in the center of the page if desired, or in any desirable place. In cases where the balances change from debit to credit very frequently, two balance columns are necessary. This is sometimes overcome by using only one balance column and a narrow key column next to it. The nature of the balance is indicated by a Dr. or a Cr. placed before it in this narrow column. The checking

JENNINGS & WAGNER (address)

Date		Items	Folio	Debits		Credits		Folio	Items	Date		

FIG. 11

DAVID LIVINGSTONE (address and rating)

Date	Entry of Items	Folio	Dr.	√	Cr.	Balance

FIG. 12

column is used by the bookkeeper or the auditor for making check-marks when verifying amounts; this column is in general use today in all kind of ledgers.

42. Package Column.—Sometimes the account is divided into two or more columns for the accommodation of items such

DONALDSON BROTHERS COMPANY

Rating__________ Address________________

Credit Limit__________

Date	Entry	Folio	Bags	Amount	Date	Entry	Folio	Bags	Amount

FIG. 13

as packages, bags, casks, interest, discount, different kinds of merchandise, etc., as is shown in Fig. 13. It is frequently advisable to keep track of such items separately, and this form has been found most appropriate. Record of bags or packages may be kept in either quantity or value. There is hardly any

Sheet No.__________ Account No.__________

Name________________ Terms__________

Address________________ Rating__________

Credit Limit__________

Date	Items	Folio	√	Debits	Date	Items	Folio	√	Credits

FIG. 14

limit to the use or adaptability of columns in ledger accounts, and in many cases books are ruled to order for meeting specific requirements. Both debit and credit columns should be in harmony.

43. Loose-Leaf Form.—The form shown in Fig. 14 can be used in either a loose-leaf or a card ledger. Indeed, any style of ruling or arrangement of columns may be used, so long as it is adapted to the needs of the business. Loose leaves are usually numbered, and the Sheet No. indicates how many sheets or leaves have been used for any one account. When a self-indexing ledger is used, the account number is not needed. The unit rulings in the money columns keep the figures in line and make them easier to add, and the number of such columns required will depend on the number of figures to be placed therein. The information respecting terms, rating, and credit limit is of special value in personal accounts.

THEORY OF ACCOUNTS

(PART 2)

CONTROLLING ACCOUNTS

GENERAL DISCUSSION

1. A **controlling account** is one which represents the aggregate of several accounts kept in detail or item form in a separate, subsidiary Ledger.

By means of such accounts, known also as *control accounts*, *summary accounts*, and *adjustment accounts*, the proprietor is enabled to ascertain without delay the total amount due from customers or to creditors. Where the accounts aggregate hundreds and even thousands, this saving of time can easily be appreciated. In nearly every large business, subordinate ledgers are kept, thus requiring the use of the controlling accounts. The personal ledgers represented by the controlling accounts are known as the sales ledger, the accounts-receivable ledger, and the debit ledger; and the purchase ledger; the accounts-payable ledger, and the credit ledger. The word *controlling* need not form part of the name of the account; it is used here to save confusion. Some bookkeepers while maintaining self-balancing ledgers do so by entirely omitting controlling accounts. When taking the monthly trial balance, they secure from the assistant bookkeepers the aggregate of accounts contained in their ledgers, and if such aggregates are correct a trial balance can be obtained without further work. The benefit derived from this procedure is that the necessity of making entries to controlling accounts is entirely obviated, thus saving time and unnecessary confusion. It is

Customers' Controlling Account

Date		Item	F.	Amount	Date		Item	F.	Amount
192— Jan.	1	Balance		$36,584.95	192— Jan.	31	Cash, receipts for month	25	$25,898.60
	31	Sales, total for month	16	22,894.33		31	Discounts	25	113.25
						31	Notes receivable	14	7,500.00
						31	Sundry credits	26	735.20
						31	Balance		25,232.23
				59,479.28					59,479.28
Feb.	1	Balance		25,232.23					

Fig. 1

advisable, however, to maintain the controlling accounts in the general ledger in order that the head bookkeeper may keep in touch at all times with conditions without having to depend on his assistants. The controlling accounts may conveniently be omitted from the subordinate ledgers.

2. Self-Balancing Ledgers.—By the use of self-balancing ledgers, it is possible for a merchant to obtain a complete statement of his business from the general ledger alone without reference to either the sales or the purchase ledger. The reasons for this are that the difference between the two sides of the sales-ledger account in the general ledger is the net total balance due from customers, and that the difference between the two sides of the purchase-ledger account shows the net total balance due to creditors; in other words, these two accounts are summaries of the ledgers that they represent.

Another great advantage in having books arranged on this principle is that mistakes in any one of the ledgers can be located quite readily, for the reason that if a ledger is out of balance the error is necessarily one connected with the entries posted to that

CREDITORS' CONTROLLING ACCOUNT

192— Jan.	31	Cash	25	$12,468 15	192— Jan.	1	Balance		$13,262 25
	31	Discounts	25	103 60		31	Purchases, for month	31	18,911 36
	31	Sundry debits	27	1,050 00					
	31	Balance		18,551 86					
				32,173 61					32,173 61
					Feb.	1	Balance		18,551 86

FIG. 2

particular ledger. When all the ledgers are in balance, the general-ledger controlling account in the sales ledger will correspond with the sales-ledger controlling account in the general ledger with the sides reversed; and the purchase-ledger controlling account in the general ledger will in a similar manner correspond with the general-ledger controlling account in the purchase ledger.

3. Debit-Ledger Controlling Account.—As has already been stated, the names used for designating different ledgers vary considerably, and yet any one of these names is perfectly suitable. The account shown in Fig. 1 will serve to illustrate the manner in which to keep the controlling account for customers during a period of 2 months. The word *controlling*, as has been said before, is frequently omitted in such cases as this.

4. Credit-Ledger Controlling Account.—The accounts with creditors are, of course, the opposite of those with customers, and for that reason they are recorded in a separate ledger. The account shown in Fig. 2 indicates the sources from which this ledger receives its entries. It must be

kept in mind that controlling accounts as a rule record totals only, though it is not unusual for separate items also to be posted therein. The illustrations show monthly totals only, but these totals may be posted weekly or even daily, if desired.

When a separate ledger is first opened, the old accounts that have to be entered in it should be posted through the journal. If there are too many accounts, the journal may record only the total, with a reference made to the various accounts themselves as opened in the ledger or as contained on a separate schedule.

The use of the controlling accounts in the various books is shown in the following pages.

COLUMNAR BOOKS OF ORIGINAL ENTRY AND CONTROLLING ACCOUNTS

EXAMPLES

5. Competition in the field of commerce has been, and still is, a prime factor in reducing the cost of doing business, particularly the cost of manual work. As the result of competition, labor-saving methods have been imperative. To some extent, this is also true—though not so apparent—with respect to the keeping of books of account, for, an account keeper who is able to utilize labor-saving methods has a decided advantage over one who does not understand the advanced methods.

The account books to be considered are those commonly used for double-entry account keeping. They are: Purchase Record, Distribution Record, Accounts-Payable Record, Record of Returns, Cash Book, Petty Cash Book, and Journal. The Ledger, though not a book of original entry, will also be considered.

6. The object of columnizing the books of original entry, is to save clerical work by posting the total of each column for which a specific ledger-account caption is used, instead of posting each item in the columns. The procedure for accomplishing the object, and obtaining proof of mathematical

accuracy, will be illustrated. It is, of course, quite obvious that it may not be possible to provide special columns upon a book of original entry for each class of items that are to be separately accounted for, as a class. It is possible, however, to utilize available space by providing columns for the classes of items which are of more frequent occurrence, preferably those which do not require further analysis.

RECORD OF PURCHASES

7. Purchases may be entered upon a form known as a *Purchase Record*, or upon a form known as *Accounts-Payable Record*, of which Fig. 3 is an illustration.

In the record shown in Fig. 3, only four distributions are shown, but the principles are the same for any number. The distributions are:

1. *Merchandise:* In this column would be entered all purchases of merchandise for sale.

2. *Selling Expenses:* In this column would be entered all purchases chargeable to selling operations.

3. *Administration Expenses:* In this column would be entered all purchases chargeable as having been incurred for conducting the business as a whole.

4. *Miscellaneous:* In these columns would be entered the name of the account, and amount of all purchases which could not properly be entered in the other columns.

It is, of course, to be understood that the number and headings of the special columns to be provided will depend upon the nature of the business, and its accounting requirements.

8. Procedure.—The form shown in Fig. 3 would be used as follows: Invoices are to be consecutively numbered and filed in numerical order, or, they may be filed in alphabetical order, but in numerical order with respect to the file for each creditor. Filing the invoices is an expedient for having them in an order which facilitates ready reference. The amount of each invoice would first be entered in the appropriate accounts-payable column, then extended to the appropriate distribution column,

PURCHASE RECORD

DECEMBER, 192–

Date	Invoice No.	Purchased From	Ledger Folio	Accounts Payable A -- L	Accounts Payable M - Z	Distribution Mdse.	Distribution Expenses Selling	Distribution Expenses Admin.	Distribution Miscellaneous Account	Distribution Miscellaneous Folio	Distribution Miscellaneous Amount
192–											
Dec. 5	2001	Smith & Co.	503		$2,005 04	$2,005 04					
8	2	Jones & Bro.	306	$3,160 20		3,140 18	$20 02				
12	3	H. Ross	502		1,512 17	1,500 00		$12 17			
13	4	J. Curtis	301	986 47		920 32			General Supplies, Oil, and Grease	11	$66 15
15	5	Henry & Co.	304	2,170 70		2,170 70					
19	6	Best & Bro.	300	1,911 12		1,911 12					
21	7	Ennis & Co.	302	2,114 18		2,114 18					
22	8	Lantz & Co.	307	876 40		866 20	10 20				
23	9	Phelps & Co.	501		2,170 20	2,150 16		20 04			
26	2010	J. Thurm	504		1,114 16	1,114 16					
29	11	Evans & Co.	303	22 12					General Supplies, Waste	11	22 12
31	12	Hecht & Co.	305	9 86		9 86					
		Totals		$11,251 05	$6,801 57	$17,901 92	$30 22	$32 21			$88 27
				Led. 6	*Led. 7*	*Led. 8*	*Led. 9*	*Led. 10*			

FIG. 3

or, if a special distribution column was not provided, it would be extended to the miscellaneous column, the name of the account being entered. At all times the addition of the total column should agree with the combined additions of the other columns.

9. The amount of each invoice would be posted to the credit of the seller, upon the subsidiary ledger. These postings are usually made daily, and they are indicated by entering the folio of the ledger in the column provided for that purpose. When all amounts in the accounts payable columns have been posted, all credit entries will be upon the ledger. The amounts in the miscellaneous column may be posted at convenient times, provided the posting is completed by the end of a month. As in the preceding case, each posting is indicated by entering the folio of the ledger in the appropriate column. These postings are made to the debit of the ledger accounts.

10. Thus far, all credit entries would have been posted, and the debit entries from the miscellaneous column would have been posted, therefore, the debit entries to complete the double entry are to be posted as follows: At the end of each month, the totals of the special columns—merchandise, selling expenses, administrative expenses—are to be posted to the debit of their respective accounts upon the ledger, thus completing the double entry. In these cases, posting may be indicated by placing the ledger folio under the amount posted.

The procedure herein outlined would be modified if controlling accounts were in use. The modifications are explained under the head of controlling accounts, later on. When loose-leaf ledgers are used, the foregoing allusions to *ledger folio* are to be understood as meaning the letter and number of the account, under which the account is indexed.

DISTRIBUTION RECORD

11. It has been explained that a further analysis may be required of the columnized accounts. Referring to the Purchase Record, Fig. 3, if the merchandise purchases included several

DISTRIBUTION RECORD — PURCHASE RECORD AUXILIARY

For December, 192– — Account — Merchandise

Class A		Class B		Class C		Class D		Class E		Class F		Class G	
Invoice No.	Amount	Invoice No.	Amount	Invoice No.	Amount	Invoice No.	Amount	Invoice No.	Amount	Invoice No.	Amount	Invoice No.	Amount
2001	$1,500.00			2001	$ 505.04			2002	$3,140.18				
2003	800.00											2003	$700.00
2004	426.15	2004	$220.35			2004	$273.82						
2005	2,170.70			2006	1,911.12					2007	$2,000.00	2007	114.18
2008	176.40	2008	689.80										
2009	2,150.16			2010	1,114.16			2011	9.86				
	$7,223.41		$910.15		$3,530.32		$273.82		$3,150.04		$2,000.00		$814.18

Summary

$7,223.41	
910.15	
3,530.32	
273.82	
3,150.04	
2,000.00	
814.18	$17,901.92

Fig. 4

distinct lines, to be separately accounted for, columns should be provided for each class—if space is available—or, the single column shown upon the illustration may be used, and the necessary analysis, for classes, obtained from a distribution record. The same conditions apply to the columns for selling and administration expenses. An example of a Distribution Record is given in Fig. 4.

12. The Distribution Record is merely a columnar record having blank spaces for classifications, therefore, any required number of classifications, for a given account, may be provided for. It is merely a choice of account-keeping procedure, as to whether the monthly totals of each classification, shown upon the distribution record, shall be transferred to separately classified accounts upon the ledger, or used as a means for supplying detailed information for a financial statement, or for some other purpose. Usually, it is not deemed necessary to substitute the details of the distribution record, for the single account posted to the ledger from the purchase record. If, however, it is desired to exhibit each classification upon the ledger, it may be done readily by a journal entry, charging an account for each classification, and crediting the single account with the amount previously charged from the purchase record. The latter account would then be closed, the debits and credits being equal.

The advantages of the distribution record are:

1. It enables an analysis to be carried to any required extent.

2. It supports, to any required detail, the ledger account which it represents.

3. It minimizes the number of accounts required upon the ledger.

4. It may be written up by any clerk, capable of carefully following the classifications marked upon the invoices by a designated authority.

ACCOUNTS-PAYABLE RECORD

DECEMBER, 192–

Date	Invoice No.	Purchased From	Ledger Folio	Accounts Payable A—L	Accounts Payable M—Z	Payment Amount	Payment How Paid	Payment Date	Payment Ref.	Distribution Mdse.	Expenses Selling	Expenses Admin.	Miscellaneous Account	Miscellaneous Fol.	Miscellaneous Amount
192–								192–							
Dec. 5	2001	Smith & Co.			2,005 04	2,005 04	Ck. 004	Dec. 15	C B	2,005 04					
8	2	Jones & Bro.		3,160 20						3,140 18	20 02				
12	3	H. Ross			1,512 17	1,512 17	Ck. 005								
							Discount	Dec. 22	C B	1,500 00		12 17			
13	4	J. Curtis		986 47						920 32			General Supplies, Oil, and Gr.		66 15
15	5	Henry & Co.		2,170 70		2,170 70	Ck. 006								
							Discount	Dec. 25		2,170 70					
19	6	Best & Bro.		1,911 12		1,911 12	Ck. 007		C B						
							Discount	Dec. 29	Returns	1,911 12					
21	7	Ennis & Co.		2,114 18		114 18			Returns	2,114 18					
22	8	Lantz & Co.		876 40		72 10			Returns	866 20	10 20				
23	9	Phelps & Co.			2,170 20					2,150 16		20 04			
26	2010	J. Thurm			1,114 16	25 11			Returns	1,114 16					
29	11	Evans & Co.		22 12									General Supplies, Waste		22 12
31	12	Hecht & Co.		9 86						9 86					
				11,251 05	6,801 57					17,901 92	30 22	32 21			88 27

FIG. 5

ACCOUNTS-PAYABLE RECORD

13. The essential difference between the Purchase Record and the Accounts-Payable Record, is, that when the purchase record is used, an account must be kept with each creditor, whereas, when the accounts-payable record is used, it is not necessary to keep an account with each creditor. If it is the uniform practice to settle an invoice by paying a single amount —or a few amounts—it may not be necessary to keep individual accounts with creditors. The accounts-payable record would then be practicable.

If, on the other hand, invoices are settled for by numerous instalment payments at comparatively lengthy periods, individual accounts with creditors are somewhat of a necessity. In this case the purchase record would be required. In the accounts-payable record shown in Fig. 5, the method of recording the payments is clearly shown.

14. In order that the different objects of the accounts-payable record and the purchase record may readily be perceived, the distribution is shown to be identical. The feature relating to payment of invoices, shown on the accounts-payable record, is practically the distinguishing feature of the record. The record is used in precisely the same manner as the purchase record, except as to the following:

1. Individual ledger accounts are not kept with the sellers, therefore, the invoices are not posted individually. For this reason, a controlling account, to be hereafter explained, must be used.

2. The amount paid is entered on the same line as the amount in the column Accounts Payable, therefore, the total of the open items in the latter column should agree with the balance of accounts payable upon the ledger, the items virtually being a list of individual accounts payable.

It will now be observed that the accounts-payable record is not practicable if running accounts with creditors are to be maintained.

RECORD OF RETURNS

15. For the purpose of providing a proper analysis of selling and purchasing transactions, two forms are required, one for returned sales, and one for returned purchases. The forms required are shown in Figs. 6 and 7. Except as to modifications required if controlling accounts (to be hereafter explained) are used, the forms would be used as follows:

16. Record of Returned Sales.—The amount of the return would be entered in the appropriate Accounts-Receivable column, and extended to the appropriate distribution classification. Each entry in the Accounts-Receivable columns would be posted to the credit of the customer's account, and the monthly totals of the column would be posted to the debit of an account—Returned Sales—upon the ledger, if one account for all classes were deemed sufficient. If an account were required upon the ledger for each classification returned (to correspond with classifications of sales), the total of each distribution column would be posted to the debit of its account upon the ledger, but under the caption of Returned Sales, separate accounts being maintained, thus: Returned Sales, S 1; Returned Sales, S 2; Returned Sales, S 3; Returned Sales, S 4.

RECORD OF PURCHASES

17. The preceding explanation of record of returned sales applies to the record of returned purchases, except that the entries in the Accounts-Payable columns would be posted to the debit of the seller's account, and the totals of the distribution columns would be posted to the credit of the ledger classification, or classifications. Usually, the records of returns will cover all classification requirements, therefore, a distribution record as an auxiliary, is not required.

RECORD OF RETURNED SALES
For December, 192–

Date	Invoice No.	Returned by	Particulars	Ledger Folios	Accounts Receivable		Distribution			
							Classifications			
					A - L	M - Z	S 1	S 2	S 3	S 4
192–										
Dec. 9	S101	Thompson & Co.	See letter 12/8	202		$102.14		$102.14		
15	S205	Devlin & Co.	Change size	103	$52.08					$52.08
22	S320	Jack & Jack	Change color	106	18.16		$18.16			
29	S510	J. Anderson	Change fabric	100	96.04		31.12		$40.88	24.04
31	S196	Martin & Co.	Letter 12/29	201		27.15		27.15		
					$166.28	$129.29	$49.28	$129.29	$40.88	$76.12
					Led. 4	*Led. 5*				
					Led. 12	*Led. 13*				

Fig. 6

RECORD OF RETURNED PURCHASES
FOR DECEMBER, 192–

Date	Invoice No.	Returned to	Particulars	Ledger Folios	Accounts Payable		Distribution			
							Classifications			
					A - L	M - Z	G	B	C	
192–										
Dec. 23	2007	Ennis & Co.	Countermanded	302	$114.18		$114.18			
	2008	Lantz & Co.	See letter 12/23	307	72.10			$72.10		
27	2010	J. Thrum	Disapproval	504		$25.11			$25.11	
30	2006	Best & Bro.	See letter 12/29	300	46.12				46.12	
					$232.40	$25.11	$114.18	$72.10	$71.23	

Led. 6 *Led. 7*
Led. 14 *Led. 15*

FIG. 7

CASH BOOK

18. A form of Cash Book that suffices for the mere purpose of recording cash receipts and disbursements is generally well understood. The form shown in Figs. 8 and 9 is arranged to meet the requirements of advanced methods.

The special features of the form, are columnar provisions for the following:

1. Controlling two ledgers for accounts receivable, and two ledgers for accounts payable, the control being a subject for explanation hereafter.
2. Keeping the details of a bank account on the cash book.

19. Debit Side of Cash Book.—The columns on the debit side of the cash book from left to right, are used as follows:

Sundry Accounts. In the Sundry Accounts column would be entered all amounts for ledger accounts, not provided for by the other columns.

Cash Sales. In Cash-Sales column would be entered cash received for cash sales. If any further classifications are required the classification may be indicated in the space Particulars, the entries for each classification being summarized at the end of each month. The summary may be shown by a schedule on the cash book—virtually a foot note.

Accounts Receivable. The Accounts-Receivable column is divided, on the supposition that the accounts receivable are contained, in alphabetical order, in two ledgers, A to L, and M to Z. When discount is allowed by way of reducing a customer's remittance, the total amount of the settlement, including the discount, is entered in the appropriate accounts receivable column. Each entry in the columns is posted to the credit of the customer's account, on the accounts-receivable ledger.

Discount on Sales. In the Discount on Sales column would be entered the discount allowed to customers, already referred to.

Net Cash. In the Net-Cash column would be entered the actual amount of cash received for each entry upon the cash book.

CASH DEBITS

Date	Account	Particulars	Ledger Folios	Sundry Accounts	Cash Sales	Accounts Receivable A - L	Accounts Receivable M - Z	Discount on Sales	Net Cash	First National Bank
192–										
Nov. 30	Balances								$ 216 20	$ 5,176 12
Dec. 2	Thompson & Co.	Invoice S 51	202				$319 10	$ 1 17	317 93	
2		Deposit								515 00
5	Devlin & Co.	Invoice S 75	103			$ 515 60		2 28	513 32	
7	Cash sales	Deposit			$ 112 50				112 50	625 82
7	First Nat'l Bank	Check 003							400 00	
9	Jack & Jack	Invoice S 120	106			315 40			315 40	
9		Deposit								315 40
12	Selling expenses	Refund, Tel. Call	9	1 10					1 10	
15	Cash sales	Deposit			317 80				317 80	318 90
19	J. Anderson	Invoice S 170	100			1,716 80		32 10	1,684 70	
20	Cash sales	Deposit			1,760 20				1,760 20	3,400 90
27	Martin & Co.	Invoice S 64	201				2,120 40	42 60	2,077 80	
31	Cash sales	Deposit			1,530 60				1,530 60	3,608 40
31	First Nat'l Bank	Check 008							300 00	
				$1 10	$3,721 10	$2,547 80	$2,439 50	$78 15	$9,547 55	$13,960 54
					Led 16	*Led 4*	*Led 5*	*Led 17*	*Led 2*	*Led 1*
192–										
Dec. 31	Balances	Brought down							$763 13	5,792 47

Fig. 8

CASH CREDITS

Date	Account	Particulars	Voucher No.	Ledger Folios	Sundry Accounts	Sundry Expenses	Accounts Payable A - L	Accounts Payable M - Z	Discount on Purchases	Net Cash	Check No.	First National Bank
192–												
Dec. 2	First Nat'l Bank	Deposit								$515 00		
3	Admin. expenses	Printing		10	$16 10						001	$ 16 10
3	Business directory	General Use				$10 00					002	10 00
7	Cash										003	400 00
7	First Nat'l Bank	Deposit								625 82		
9	First Nat'l Bank	Deposit								315 40		
15	First Nat'l Bank	Deposit								318 90		
15	Smith & Co.	Invoice 2001		503				$2,005 04			004	2,005 04
20	First Nat'l Bank	Deposit								3,400 90		
22	H. Ross	Invoice 2003		502				1,512 17	$30 24		005	1,481 93
25	Henry & Co.	Invoice 2005		304			$2,170 70		43 40		006	2,127 30
29	Best & Bro.	Invoice 2006		300			1,865 00		37 30		007	1,827 70
31	First Nat'l Bank	Deposit								3,608 40		
31	Cash										008	300 00
31	Balances	Forward								763 13		5,792 47
					$16 10	$10 00	$4,035 70	$3,517 21	$110 94	$9,547 55		$13,960 54
						Led 18	*Led 6*	*Led 7*	*Led 19*	*Led 2*		*Led 1*

Fig. 9

First National Bank. In the First National Bank column would be entered, in one amount, each deposit made in the bank. The details of the deposit should be supported by a filed copy of the deposit slip, or, in case of a large number of items, by a deposit record kept for the purpose. The object in either case, is to be able to trace each amount that has entered into a deposit.

20. Credit Side of Cash Book.—The use of the columns on the credit side of the cash book is the same as with the debit side, except as to differences of account captions, and that the transactions (with the exception of Net Cash and First National Bank) would be posted to the debit of their respective accounts upon the ledger.

21. The **petty cash book,** shown in Fig. 10, is an auxiliary of the general cash book. Its object is to relieve the general cash book from the details required for recording numerous small cash disbursements for which checks would not ordinarily be issued. The distribution columns are usually headed with the account caption when entries are to be made. Until that time, the heads of the columns are blank. The total of each distribution column is posted to its appropriate account upon the ledger at the end of each month in the same manner as explained for the preceding records.

JOURNAL

22. The Journal, one page of which is shown in Fig. 11, is one of the most important books of original entry. Its functions are the providing of entries for the ledger, which, although they may arise in connection with other books of original entry, are not of a character that permits entry therein. Journal entries are largely adjustments of ledger accounts, or a means by which a concise record is shown for amounts placed upon the ledger; they show the connection of one account and the amount of the entry thereto, with another account, and the amount of the entry thereto, for each entry. The amounts debited and credited must agree for each entry.

PETTY CASH BOOK

Petty Cash — Debits — Credits

Date	Particulars	Amount	Distribution: Selling Expense	Sundry Expense	Adminis-tration Expense				Total
192–									
Nov. 30	Balance	$53.60							
Dec. 5	Stamps		$2.50						$ 2.50
10	Pair of shears			$0.50					.50
14	Typing ribbons		2.70						2.70
19	Expressage, samples		.78						.78
22	Janitor service		1.50		$1.50				3.00
31	Balance								44.12
		$53.60	$7.48	$0.50	$1.50				$53.60
31	Balance brought down	$44.12	*Led. 9*	*Led. 18*	*Led. 10*				*Led. 3*

FIG. 10

In the course of any business, it is very probable that journal entries will be required which affect personal property, and nominal accounts; it is, therefore, very necessary to provide a voucher for each entry. Vouchers should be approved by a competent authority, should be consecutively numbered, and filed in numerical order—the order in which they are numbered in the Voucher No. column of the journal—for reference. Complete explanations should be made for each entry.

LEDGERS

23. General Ledger.—The information required for the preparation of financial statements—that is, Balance Sheet and Profit and Loss Statement—is obtained from general-ledger accounts, and, as financial statements are prepared from a trial balance of the ledger, it is very important that the arrangement of accounts in the ledger should conform to the order required for the statements.

Assets should occupy one section of the ledger, liabilities another, and the nominal, or profit-and-loss, accounts another. The accounts representing assets and liabilities should appear, in their respective sections, in the order of their importance with respect to their availability for producing cash in the one case, and the necessity for providing cash payments in the other. Assets of a current nature (as cash, accounts receivable, notes receivable, etc.) and assets representing fixed properties (as land, buildings, machinery, etc.) should occupy distinct parts of the section allotted to assets. In the same manner, current liabilities (as accounts payable, notes payable, etc.) and liabilities of a fixed character (as bonds, coupon notes, capital stock, etc.) should occupy distinct parts of the section allotted to liabilities. The section provided for the nominal, or profit-and-loss, accounts should be divided in the same order in which the accounts are to appear upon a profit-and-loss statement.

If the foregoing principles are followed, a trial balance of the general ledger will present the accounts in proper order for financial statements. If this order is not preserved, the

JOURNAL

Debits											Credits					
Accounts Receivable		Accounts Payable		Sales Allowance	Sundry Accounts	Ledger Folio	Date	Account and Explanation	Vou. No.	Ledger Folio	Sundry Accounts	Purchase Allowed	Accounts Payable		Accounts Received	
A-L	M-Z	A-L	M-Z										A-L	M-Z	A-L	M-Z
							192–									
$718 10						107	Dec. 8	John Thompson & Co.								
								Joseph Johnson & Co.		108					$718 10	
								To correct error in charging the latter with Sales Inv. S 30, Nov. 28.								
					$34 10	5	Dec. 15	Selling Expenses								
								Sundry Expenses		18	$34 10					
								To correct error in charging the latter with purchase invoice, Nov. 27								
				$14 10			Dec. 17	Sales Allowances								
								John Johnson & Co.		107					$14 10	
								Allowance on Sales Invoice number 30, Nov. 28								
			$5 80			505	Dec. 28	E. J. West								
								Purchase Allowances				$5 80				
								Allowance on purchase invoice number 1894, Nov. 30								
$718 10			$5 80	$14 10	$34 10						$34 10	$5 80			$732 20	
Led [illegible]			Led 7	Led 20								Led 21			Led 4	

Fig. 11

preparation of financial statements will be disjointed and difficult.

Controlling accounts are usually carried upon the general ledger. They exhibit the totals only of transactions which are exhibited in detail upon the ledger which is *controlled.* The controlling accounts for the general-ledger accounts that are illustrated in the following pages are as follows:

Accounts Receivable,	A-L	$17,391.92	Dr.
" "	M-Z	18,581.61	Dr.
Accounts Payable,	A-L	6,982.95	Cr.
" "	M-Z	3,259.25	Cr.

Each of the illustrated ledgers, thus controlled, exhibits the personal balances which aggregate the totals shown upon the general ledger.

By comparing the postings, from the books of original entry, that have been shown, with the entries upon the ledgers as they appear in the following pages, the procedure for using columnar records and controlling accounts, should be quite clear.

24. Arrangement of Subsidiary Ledgers.—Subsidiary ledgers, in which are kept accounts receivable, and accounts payable, should be alphabetically arranged. In a large business it is often an advantage to sectionalize the accounts-receivable ledgers with respect to states, the alphabetical arrangement of customers' names being followed for each state, or other subdivision.

Referring to the Purchase Record, and Accounts-Payable Record, Figs. 3 and 5, it will be noticed that precisely the same entries appear upon each form. Postings to the ledgers have been made from the former, the latter record being shown to illustrate the manner in which unpaid invoices form the list of accounts payable, thus rendering an accounts-payable ledger unnecessary when the Accounts-Payable Record is practicable for the purpose.

APPLICATION OF CONTROLLING ACCOUNTS

25. The discussion that now follows will explain clearly the detailed use of each of the forms already shown and will illustrate their connection with a ledger. In Fig. 12 is shown the trial balance of a ledger at Nov. 30, 192-. The object in view is to explain the use of columnar books of original entry, and to show how a control of accounts is effected. It is not necessary for these purposes, to show in the trial balance accounts that are not affected by the entries illustrated; such accounts—except Credit Sales used for balancing purposes—have therefore been omitted.

TRIAL BALANCE OF GENERAL LEDGER
AT NOVEMBER 30, 192-

	DR.	CR.
First National Bank	$ 5,176.12	
Cash on hand	216.20	
Petty Cash	53.60	
Accounts receivable, A—L	20,120.10	
Accounts receivable, M—Z	21,150.40	
Accounts payable, A—L	....	....
Accounts payable, M—Z		$ 5.80
Merchandise	16,120.60	
Selling expenses	2,140.20	
Administration expenses	3,120.80	
General supplies	316.22	
Returned sales, A—L	517.60	
Returned sales, M—Z	319.11	
Returned purchases, A—L		810.16
Returned purchases, M—Z		520.30
Cash sales		15,160.19
Credit sales		52,567.62
Discount on sales	317.22	
Sundry expenses	510.16	
Discount from purchases		922.22
Allowances on sales	120.14	
Allowances from purchases		212.18
Totals	$70,198.47	$70,198.47

FIG. 12

26. For the purpose of providing a basis from which to trace the transactions for December, the accounts receivable and accounts payable at November 30, 192– are assumed to be as shown in Fig. 13.

ACCOUNTS RECEIVABLE AT NOVEMBER 30, 192–

	A—L	M—Z
Anderson, J	$3,812.14	
Bechtel, F.	6,150.12	
Carr & Carr	1,518.18	
Devlin & Co.	1,567.08	
Guth, W.	1,830.40	
Jack & Jack	2,333.56	
Johnson, John & Co.	1,830.52	
Johnson, Joseph & Co.	718.10	
Martin & Co.		$ 8,127.55
Thompson & Co.		6,421.24
Wall, A. B.		6,601.61
Totals	$20,120.10	$21,150.40

ACCOUNTS PAYABLE, AT NOV. 30, 192–

	A—L	M—Z
E. J. West		$5.80

FIG. 13

27. In order that the Purchase Record and Accounts-Payable Record previously described may be fully understood, the balances of Accounts Payable at Nov. 30, 192–, have been confined to the small amounts represented by adjustments during the month of December.

After all postings have been made from the various illustrations, and Trial Balances at Nov. 30, 192–, the following accounts will appear upon the general ledger, at Dec. 31, 192–.

GENERAL LEDGER ACCOUNTS

Folio 1		DR.	CR.
	First National Bank		
192–			
Nov. 30	Balance	$5,176.12	
Dec. 31	Total debits (less balance $5,176.12)	8,784.42	
Dec. 31	Total credits (less balance $5,792.47)		$ 8,168.07
Dec. 31	Balance down		5,792.47
		$13,960.54	$13,960.54
Dec. 31	Balance brought down	$ 5,792.47	

General Ledger Accounts—*Continued*

Folio 2

Cash Account

192–		Dr.	Cr.
Nov. 30	Balance	$ 216.20	
Dec. 31	Cash debits (less balance $216.20)	9,331.35	
Dec. 31	Cash credits (less balance $763.13)		$8,784.42
Dec. 31	Balance down		763.13
		$9,547.55	$9,547.55
Dec. 31	Balance brought down	$ 763.13	

Folio 3

Petty Cash

192–			
Nov. 30	Balance	$53.60	
Dec. 31	Petty Cash credits (less balance $44.12)		$ 9.48
Dec. 31	Balance down		44.12
		$53.60	$53.60
Dec. 31	Balance brought down	$44.12	

Folio 4

Accounts Receivable A—L

192–			
Nov. 30	Balance	$20,120.10	
Dec. 31	Returned sales		$ 166.28
Dec. 31	Cash		2,547.80
Dec. 31	Journal	718.10	
Dec. 31	Journal		732.20
Dec. 31	Balance down		17,391.92
		$20,838.20	$20,838.20
Dec. 31	Balance brought down	$17,391.92	

GENERAL LEDGER ACCOUNTS—*Continued*

Folio 5

Accounts Receivable M—Z

			Dr.	Cr.
192–				
Nov.	30	Balance	$21,150.40	
Dec.	31	Returned sales		$ 129.29
Dec.	31	Cash		2,439.50
Dec.	31	Balance down		18,581.61
			$21,150.40	$21,150.40
Dec.	31	Balance brought down	$18,581.61	

Folio 6

Accounts Payable A—L

			Dr.	Cr.
192–				
Nov.	30	Balance		
Dec.	31	Purchase record		$11,251.05
Dec.	31	Returned purchases	$ 232.40	
Dec.	31	Cash	4,035.70	
Dec.	31	Balance down	6,982.95	
			$11,251.05	$11,251.05
Dec.	31	Balance brought down		$6,982.95

Folio 7

Accounts Payable M—Z

			Dr.	Cr.
192–				
Nov.	30	Balance		$ 5.80
Dec.	31	Purchase record		6,801.57
Dec.	31	Returned purchases	$ 25.11	
Dec.	31	Cash	3,517.21	
Dec.	31	Journal	5.80	
Dec.	31	Balance down	3,259.25	
			$6,807.37	$6,807.37
Dec.	31	Balance brought down		$3,259.25

General Ledger Accounts—*Continued*

Folio 8

Merchandise		Dr.	Cr.
192–			
Nov. 30	Balance	$16,120.60	
Dec. 31	Purchase record	17,901.92	
Dec. 31	Balance down		$34,022.52
		$34,022.52	$34,022.52
Dec. 31	Balance brought down	$34,022.52	

Folio 9

Selling Expenses			
192–			
Nov. 30	Balance	$2,140.20	
Dec. 12	Cash		$ 1.10
Dec. 15	Journal	34.10	
Dec. 31	Petty cash	7.48	
Dec. 31	Purchase record	30.22	
Dec. 31	Balance down		2,210.90
		$2,212.00	$2,212.00
Dec. 31	Balance brought down	$2,210.90	

Folio 10

Administration Expenses			
192–			
Nov. 30	Balance	$3,120.80	
Dec. 3	Cash	16.10	
Dec. 31	Petty cash	1.50	
Dec. 31	Purchase record	32.21	
Dec. 31	Balance down		$3,170.61
		$3,170.61	$3,170.61
Dec. 31	Balance brought down	$3,170.61	

GENERAL LEDGER ACCOUNTS—*Continued*

Folio 11

General Supplies

			Dr.	Cr.
192–				
Nov.	30	Balance	$316.22	
Dec.	13	Purchase record	66.15	
Dec.	29	Purchase record	22.12	
Dec.	31	Balance down		$404.49
			$404.49	$404.49
Dec.	31	Balance brought down	$404.49	

Folio 12

Returned Sales, A—L

			Dr.	Cr.
192–				
Nov.	30	Balance	$517.60	
Dec.	31	Returned sales	166.28	
Dec.	31	Balance down		$683.88
			$683.88	$683.88
Dec.	31	Balance brought down	$683.88	

Folio 13

Returned Sales, M—Z

			Dr.	Cr.
192–				
Nov.	30	Balance	$319.11	
Dec.	31	Returned sales	129.29	
Dec.	31	Balance down		$448.40
			$448.40	$448.40
Dec.	31	Balance brought down	$448.40	

Folio 14

Returned Purchases, A—L

			Dr.	Cr.
192–				
Nov.	30	Balance		$810.16
Dec.	31	Returned purchases		232.40
Dec.	31	Balance down	$1,042.56	
			$1,042.56	$1,042.56
Dec.	31	Balance brought down		$1,042.56

GENERAL LEDGER ACCOUNTS—*Continued*

Folio 15

Returned Purchases, M—Z		Dr.	Cr.
192–			
Nov. 30	Balance		$520.30
Dec. 31	Returned purchases		25.11
Dec. 31	Balance down	$545.41	
		$545.41	$545.41
Dec. 31	Balance brought down		$545.41

Folio 16

Cash Sales			
192–			
Nov. 30	Balance		$15,160.19
Dec. 31	Cash		3,721.10
Dec. 31	Balance down	$18,881.29	
		$18,881.29	$18,881.29
Dec. 31	Balance brought down		$18,881.29

Folio 16 a

Credit Sales			
192–			
Nov. 30	Balance		$52,567.62

Folio 17

Discount on Sales			
192–			
Nov. 30	Balance	$317.22	
Dec. 31	Cash	78.15	
Dec. 31	Balance down		$395.37
		$395.37	$395.37
Dec. 31	Balance brought down	$395.37	

GENERAL LEDGER ACCOUNTS—*Continued*

Folio 18

Sundry Expenses

			Dr.	Cr.
192–				
Nov.	30	Balance	$510.16	
Dec.	15	Journal		$ 34.10
Dec.	31	Cash—Business directory	10.00	
Dec.	31	P/cash, pair of shears	.50	
Dec.	31	Balance down		486.56
			$520.66	$520.66
Dec.	31	Balance brought down	$486.56	

Folio 19

Discount from Purchases

			Dr.	Cr.
192–				
Nov.	30	Balance		$ 922.22
Dec.	31	Cash		110.94
Dec.	31	Balance down	$1,033.16	
			$1,033.16	$1,033.16
Dec.	31	Balance brought down		$1,033.16

Folio 20

Allowances on Sales

			Dr.	Cr.
192–				
Nov.	30	Balance	$120.14	
Dec.	17	Journal	14.10	
Dec.	31	Balance down		$134.24
			$134.24	$134.24
Dec.	31	Balance brought down	$134.24	

Folio 21

Allowances from Purchases

			Dr.	Cr.
192–				
Nov.	30	Balance		$212.18
Dec.	31	Journal		5.80
Dec.	31	Balance down	$ 217.98	
			$217.98	$217.98
Dec.	31	Balance brought down		$217.98

28. A summary of the foregoing balances of the General Ledger is shown in the Trial Balance, Fig. 14.

TRIAL BALANCE—GENERAL LEDGER
at December 31, 192–

	Dr.	Cr.
First National Bank	$5,792.47	
Cash on hand	763.13	
Petty cash	44.12	
Accounts receivable, A—L	17,391.92	
Accounts receivable, M—Z	18,581.61	
Accounts payable, A—L		$ 6,982.95
Accounts payable, M—Z		3,259.25
Merchandise	34,022.52	
Selling expenses	2,210.90	
Administration expenses	3,170.61	
General supplies	404.49	
Returned sales, A—L	683.88	
Returned sales, M—Z	448.40	
Returned purchases, A—L		1,042.56
Returned purchases, M—Z		545.41
Cash sales		18,881.29
Discount on sales	395.37	
Sundry expenses	486.56	
Discount from purchases		1,033.16
Allowances on sales	134.24	
Allowances from purchases		217.98
Credit sales		52,567.62
Totals	$84,530.22	$84,530.22

FIG. 14

29. The Accounts Receivable ledgers will show the following details, at December 31, 192–:

ACCOUNTS RECEIVABLE LEDGER, A—L

Folio 100

Anderson, J.		Dr.	Cr.
192–			
Nov. 30	Balance	$3,812.14	
Dec. 19	Cash and discount		$1,716.80
Dec. 29	Returned sales		96.04
Dec. 31	Balance down		1,999.30
		$3,812.14	$3,812.14
Dec. 31	Balance brought down	$1,999.30	

ACCOUNTS RECEIVABLE LEDGER—*Continued*

Folio 101

Bechtel, F.		Dr.	Cr.
192–			
Nov. 30	Balance	$6,510.12	

Folio 102

Carr & Carr			
192–			
Nov. 30	Balance	$1,518.18	

Folio 103

Devlin & Co.			
192–			
Nov. 30	Balance	$1,567.08	
Dec. 5	Cash and discount		$ 515.60
Dec. 15	Returned sales		52.08
Dec. 31	Balance down		999.40
		$1,567.08	$1,567.08
Dec. 31	Balance brought down	$ 999.40	

Folio 105

Guth, W.			
192–			
Nov. 30	Balance	$1,830.40	

Folio 106

Jack & Jack			
192–			
Nov. 30	Balance	$2,333.56	
Dec. 9	Cash		$ 315.40
Dec. 22	Returned sales		18.16
Dec. 31	Balance down		2,000.00
		$2,333.56	$2,333.56
Dec. 31	Balance brought down	$2,000.00	

ACCOUNTS RECEIVABLE LEDGER—*Continued*

Folio 107

Johnson, John & Co.		Dr.	Cr.
192–			
Nov. 30	Balance	$1,830.52	
Dec. 8	Journal	718.10	
Dec. 17	Journal		$ 14.10
Dec. 31	Balance down		2,534.52
		$2,548.62	$2,548.62
Dec. 31	Balance brought down	$2,534.52	

Folio 108

Johnson, Joseph & Co.			
192–			
Nov. 30	Balance	$718.10	
Dec. 8	Journal		$718.10
		$718.10	$718.10

LIST OF BALANCES, AT DEC. 31, 192–

	Dr.	Cr.
Anderson, J.	$ 1,999.30	
Bechtel, F.	6,510.12	
Carr & Carr	1,518.18	
Devlin & Co.	999.40	
Guth, W.	1,830.40	
Jack & Jack	2,000.00	
Johnson, John & Co.	2,534.52	
(See Control, general ledger trial balance) Total	$17,391.92	

ACCOUNTS RECEIVABLE LEDGER, M—Z

Folio 201

Martin & Co.		Dr.	Cr.
192–			
Nov. 30	Balance	$8,127.55	
Dec. 27	Cash and discount		$2,120.40
Dec. 31	Returned sales		27.15
Dec. 31	Balance down		5,980.00
		$8,127.55	$8,127.55
Dec. 31	Balance brought down	$5,980.00	

ACCOUNTS RECEIVABLE LEDGER—*Continued*

Folio 202

Thompson & Co.

192-		Dr.	Cr.
Mar. 30	Balance	$6,421.24	
Dec. 2	Cash and discount		$ 319.10
Dec. 9	Returned sales		102.14
Dec. 31	Balance down		6,000.00
		$6,421.24	$6,421.24
Dec. 31	Balance brought down	$6,000,00	

Folio 203

Wall, A. B.

192–			
Nov. 30	Balance	$6,601.61	

LIST OF BALANCES, AT DEC. 31, 192–

	Dr.	Cr.
Martin & Co.	$ 5,980.00	
Thompson & Co.	6,000.00	
Wall, A. B.	6,601.61	
(See Control, general ledger trial balance) Total	$18,581.61	

ACCOUNTS PAYABLE LEDGER, A—L

Folio 300

Best & Bro.

192–		Dr.	Cr.
Dec. 19	Purchase record		$1,911.12
Dec. 29	Cash and discount	$1,865.00	
Dec. 30	Returned purchases	46.12	
		$1,911.12	$1,911.12

Folio 301

Curtis, J.

192–			
Dec. 13	Purchase record		$986.47

ACCOUNTS PAYABLE LEDGER—*Continued*

Folio 302

Ennis & Co.		Dr.	Cr.
192–			
Dec. 21	Purchase record		$2,114.18
Dec. 23	Returned purchased	$ 114.18	
Dec. 31	Balance down	2,000.00	
		$2,114.18	$2,114.18
Dec. 31	Balance brought forward		$2,000.00

Folio 303

Evans & Co.			
192–			
Dec. 31	Purchase record		$ 22.12

Folio 304

Henry & Co.			
192–			
Dec. 15	Purchase record		2,170.70
Dec. 28	Cash and discount	$2,170.70	
		$2,170.70	$2,170.70

Folio 305

Hecht & Bro.			
192–			
Dec. 31	Purchase record		$9.86

Folio 306

Jones & Bro.			
192–			
Dec. 8	Purchase record		$3,160.20

Folio 307

Lantz & Co.			
192–			
Dec. 22	Purchase record		$ 876.40
Dec. 23	Returned purchases	$ 72.10	
Dec. 31	Balance down	804.30	
		$876.40	$876.40
Dec. 31	Balance brought down		$804.30

LIST OF BALANCES, AT DEC. 31, 192–

	Dr.	Cr.
Curtis, J		$ 986.47
Ennis & Co.		2,000.00
Evans & Co.		22.12
Hecht & Bro.		9.86
Jones & Bro.		3,160.20
Lantz & Co.		804.30
(See Control, general ledger trial balance) Total		$6,982.95

ACCOUNTS-PAYABLE LEDGER, M—Z

	Dr.	Cr.
Folio 501		
Phelps & Co.		
192–		
Dec. 23 Purchase record		$2,170.20
Folio 502		
Ross, H.		
192–		
Dec. 12 Purchase record		$1,512.17
Dec. 22 Cash and Discount	$1,512.17	
	$1,512.17	$1,512.17
Folio 503		
Smith & Co.		
192–		
Dec. 5 Purchase record		$2,005.04
Dec. 15 Cash	$2,005.04	
	$2,005.04	$2,005.04
Folio 504		
Thurm, J.		
192–		
Dec. 26 Purchase record		$1,114.16
Dec. 27 Returned purchases	$ 25.11	
Dec. 31 Balance down	1,089.05	
	$1,114.16	$1,114.16
Dec. 31 Balance brought down		$1,089.05

Accounts Payable Ledger—*Continued*

Folio 505

West, E. J.

		Dr.	Cr.
192–			
Nov. 30	Balance		$5.80
Dec. 28	Journal	$5.80	
		$5.80	$5.80

List of Balances, Dec. 31, 192–

	Dr.	Cr.
Phelps & Co.		$2,170.20
Thurm, J.		1,089.05
(See Control, general ledger trial balance) Total		$3,259.25

30. As previously stated, the illustrations are to be taken only as exemplifying the principles involved in the use of columnar books of original entry, and controlling accounts, therefore, the details entered upon the various accounts are for the purpose of tracing the entries rather than for explaining the transactions. It must be borne in mind that:

1. All original entries should be clearly explained, and referenced.

2. Accounts classification should be so complete that the ledger, and auxiliary distribution records should not require further analysis.

31. Notes Book as a Principal Book.—The bill book, or notes book, Fig. 15, contains a complete record of all notes and acceptances received and all notes and acceptances given: it is also known as *notes-receivable* and *notes-payable book*. The first half of the book is usually devoted to commercial paper received and the second half to commercial paper given. In a business where few notes and acceptances are handled this book is kept entirely as an auxiliary book of memorandum nature for the purpose of showing the details of the paper given and received, while the book entries for such papers are made in the journal and from there posted to the ledger accounts affected.

BILL BOOK

192—

BILLS RECEIVABLE (OR NOTES RECEIVABLE)

No.	When Received		Account Credited	L. F.	Amount	Maker or Drawer	Date of Note	Time	Due	How Settled	Remarks
1	Sept.	20	A. B. Donlin	11	300 00	A. B. Donlin	Sept. 20	20 days	Oct. 10		
2	Sept.	22	J. W. Stevens	11	200 00	J. W. Stevens	Sept. 22	1 month	Oct. 22		
			Dr. Bills receivable	10	500 00						
			Cr. Accounts receivable	25							

192—

BILLS PAYABLE (OR NOTES PAYABLE)

No.	Date		Account Debited	L. F.	Amount	Payee	Time	Due	How Settled	Remarks
1	Sept.	20	Bain & Murray	12	600 00	Bain & Murray	30 days	Oct. 20		
2	Sept.	22	S. H. Long	12	400 00	S. H. Long	20 days	Oct. 12		
			Dr. Accounts payable		1,000 00					
			Cr. Bills payable							

FIG. 15

32. Sometimes the bill book is used as a *principal book;* in other words, as a posting medium. In such a case all notes and acceptances are entered directly into this book and not into the journal; posting is done directly from it to the ledger accounts in the same manner as cash is posted from the cash book to the ledger accounts, thus obviating the necessity of making extra journal entries.

In connection with the *bills receivable*, all notes and acceptances are recorded, and there should be columns for accounts to be credited, the ledger folio, amounts of notes received, and an additional column not shown in Fig. 15 for crediting amounts of payments. All payments on account of the notes and acceptances are shown in the credit column. At the end of each week or month the totals of bills receivable should be carried to the bills-receivable account in the general ledger. This posting of totals may be done directly from the bill book or by means of journal entries, as in the case of sales and purchases shown later in the journal. The aggregate amount of credits to bills receivable is posted from the cash book and journal to the credit of bills-receivable account in the general ledger. The paper remaining unpaid should be listed, in order to prove its correctness by comparison with the bills-receivable account in the general ledger. When the notes handled are numerous, special columns should be maintained in the cash book for their accommodation.

33. In connection with the *bills payable*, notes and acceptances payable should be handled similarly to the bills receivable, though the entries will be in reverse order. Renewals can be handled by simply making memoranda of such renewals in the bill book, by making two entries, one entry for cancelation of the old note and another for the new note issued. The general-ledger account may be carried as shown in Fig. 16, though postings may be made more frequently if desired. The account may be left open and the monthly balances noted in the margin. It is advisable, however, to balance it at least once a year. The balance should agree with the unpaid notes, as per bill book, and should be verified regularly. The notes-payable account is kept in the same manner, except that items are reversed.

Notes Receivable

192–				192–				
Jan.	31	Bill book	$ 7,640 20	Jan.	31	Cash	$ 3,264 80
Feb.	28	Bill book	3,984 60	Feb.	28	Cash	5,132 50
Mar.	31	Bill book	6,150 75	Mar.	31	Cash	4,565 70
Apr.	30	Bill book	9,548 30	Apr.	30	Cash	6,212 50
				Apr.	30	Balance	8,148 35
			$27,323 85				$27,323 85
May	1	Balance	$ 8,148 35				

Fig. 16

34. Notes Receivable Discounted.—When a firm discounts any of its notes receivable, a contingent liability is created, in that the firm indorses such notes and thus renders itself liable for their payment in the event they are not honored by the makers at the date of maturity. It is desirable that the amount of this contingent liability be shown at all times on the books and financial statements and, for this reason, instead of debiting Cash and crediting notes receivable direct when a note is discounted, an entry is made debiting Cash and crediting a notes-receivable discounted account. This latter account is really a valuation account, offsetting the debit balance of the asset account, notes receivable.

The difference between the credit balance of the notes-receivable discounted account and the debit balance of the notes-receivable account represents the net value of all notes receivable remaining on hand. When a note is paid, upon proper notification from the bank, or if no notification to the effect that the note has not been paid by the maker, is received, an entry is made debiting notes receivable discounted and crediting notes receivable for the amount of the note, thus reducing the amount of the contingent liability and charging the asset account off the books to a corresponding extent. On the other hand, if it so happens that the maker of the note does not pay it at maturity, thus making the liability of the firm discounting it a real instead of a contingent liability, the entries necessary are those which will record the settlement of

the note with the bank and wipe out the contingent liability on the books. The entries are as follows:

Notes receivable discounted
  Cash
Person giving the note
  Notes Receivable

The indorser in this case receives the dishonored note from the bank where it serves as evidence of indebtedness in action against the person or firm from whom it was received.

35. In order further to illustrate the operation of the notes receivable discounted account, assume that there have been received by a wholesale merchant six notes of $100, $200, $300, $400, $500, and $600, respectively. In such a case the procedure would be as follows: First, the notes-receivable account would be debited in the usual way for $2,100. Next, notes 2, 3, 4, and 5 would be discounted, making a total of $1,400 discounted. If it be assumed that the discount is $12 and the proceeds are left to the credit of the merchant, the entry will be:

Interest and discount	$ 12.00	
Bank or cash	1,388.00	
To notes receivable discounted		$1,400.00
(Full explanation must be given)		

It will be seen that the actual amount of notes in the merchant's possession is the total of the notes receivable less the credit balance of notes discounted, which leaves $700. Whenever any of the discounted notes are paid, it means that the banker receives the amount due and the maker gets back his note; so far as the merchant is concerned, the transactions have the effect of lessening the ledger assets and decreasing the ledger liabilities by the same amount. Suppose, then, that notes 3 and 5 were paid, the entry would be:

Notes receivable discounted	$800.00	
To notes receivable		$800.00
(Full explanation here)		

It will be noted that up to this time these notes appeared on the ledger as an asset, but were offset by the liability shown

under the name of notes receivable discounted. The difference between the two sides of the notes receivable discounted account now shows $600, which is the amount of notes still under discount; deducting the $600 from the $1,300 gives $700, which is the total amount of notes actually on hand, consisting of Nos. 1 and 6 and amounting to $100 and $600, respectively. In this way, the merchant is able to tell at any time the amount of his indirect liability on notes discounted.

In preparing statements, it is best to show the total notes receivable; then from this total to deduct the amount of notes under discount at the bank. The balance will be the aggregate amount of notes receivable still on hand, as shown. Since the plan of handling notes receivable discounted herein described involves considerable work in journalizing, there is some objection to its use. As an alternative, the notes-receivable book could be made to exhibit this information with very little extra work, but in some way to prevent this contingent liability being overlooked.

36. Notes receivable transferred by indorsement to creditors to apply on account should be included as notes receivable discounted, because the contingent liability thereon is the same as in notes discounted at the bank. If, however, a note is transferred and indorsed *without recourse* it should not be included in the account for notes discounted, as there is no

BALANCE SHEET, DECEMBER 31, 192—
(*Showing the Manner of Listing Notes Under Discount*)

Cash	$ 4,200.00	Accounts payable	$15,607.10
Accounts receivable*	11,392.60	Notes payable	7,000.00
Notes receivable	1,300.00	Notes receivable discounted	600.00
Merchandise	26,814.50		
Fixtures	4,500.00	Capital	25,000.00
	$48,207.10		$48,207.10

FIG. 17

further liability on it. In this case, the indorser guarantees that the note is genuine, but does not guarantee its payment.

37. In preparing the balance sheet, there are two ways of showing the notes discounted. One way is to include them with the liabilities, while the total notes receivable appear among the assets. Another way is to show them only among

BALANCE SHEET, DECEMBER 31, 192—
(Another Way of Showing Notes Receivable Discounted)

Cash		$ 4,200.00	Accounts payable	$15,607.10
Accounts receivable		11,392.60	Notes payable	7,000.00
Notes receivable*	$1,300		Capital	25,000.00
Less notes under discount	600	700.00		
Merchandise		26,814.50		
Fixtures		4,500.00		
		$47,607.10		$47,607.10

FIG. 18

*Sometimes only a foot-note is made on the balance sheet, calling attention to the amount of notes receivable under discount at the bank. Since they are a contingent liability, they should, of course, be shown somewhere and this plan brings them to the attention of the management.

the assets as a deduction from the aggregate notes receivable. The brief balance sheets shown in Figs. 17 and 18 are used to illustrate the two methods of handling the discounted notes

NOTES RECEIVABLE

Debit with:	*Credit with:*
(*a*) Notes and acceptances received at face value, either in our favor or transferred to us by indorsement.	(*b*) Notes and acceptances, at face value, when paid in full or in part.
	(*c*) Notes discounted at bank, when paid at maturity.
	(*d*) Notes transferred to others, when paid at maturity.
	(*e*) Notes and acceptances canceled or transferred to overdue account.

FIG. 19

that are still unpaid, after the two for $300 and $500 were paid. The notes-receivable account now has a debit of $1,300 and the notes-discounted account, a credit of $600.

Figs. 19 and 20 serve to show under what conditions entries for notes receivable and notes receivable discounted should be made.

38. Acceptances.—Acceptances have reference exclusively to drafts or bills of exchange that have been made by us or to us, whether two-party or three-party. A draft is *accepted*, as is well known, by writing across its face the word accepted and the date, accompanied by the signature of the drawee. If it

NOTES RECEIVABLE DISCOUNTED

Debit with:	*Credit with.*
(*c*) Notes and acceptances when paid, that have been previously credited to this account.	(*a*) Notes and acceptances discounted at bank. (*b*) Notes sold or transferred to others.

FIG. 20

is drawn in our favor and accepted, we debit notes receivable or bills receivable, and credit the drawer or the person from whom it is received. If accepted by us, we debit the drawer because he has made a demand on us and credit notes payable or bills payable. Since notes are used more extensively than drafts, both are usually included in the same account.

39. Dishonored and Overdue Notes.—Notes dishonored by non-payment should be looked after carefully and removed from the notes-receivable account. It is not unusual to find overdue notes, especially in concerns that handle a great many promissory notes made by good customers. When they are past due, an entry should be made as follows:

Notes receivable overdue
  To notes receivable

This procedure recognizes correct classifications of items and the division of notes into good, past due, etc. Overdue notes should, of course, either be renewed or adjusted in some way in order to impress more effectively upon the maker the necessity of definitely deciding on a date for payment. They should be amply provided for through the reserve for bad debts

account. Rightfully, dishonored notes should be charged back to the maker's account, along with all charges for interest, expenses, and protest fees. If the notes had already been discounted at the bank and had to be lifted by you, the following entries would be made on your books.

Customer
  To cash, or bank
Notes receivable discounted
  To notes receivable

40. Notes of Directors and Employes.—Notes of directors, officers, stockholders, and employes that do not represent actual business transactions should be kept separate from the regular commercial paper received from customers. A separate account for special notes receivable might be opened, though, of course, there is no serious objection to keeping them all in the regular notes-receivable account. If they are all kept together, regular reports should be made to the directors exhibiting the special notes receivable and the names of the makers in a schedule separate from notes of customers. This plan may be applied also to notes payable that have been given to other than regular trade creditors. The main object is to provide an accounting system that will exhibit true conditions by having separate accounts for special items. There has been too great a tendency in the past to put many dissimilar items into one account.

THEORY OF ACCOUNTS
(PART 3)

LEDGER ACCOUNTS

CLASSIFICATION AND ARRANGEMENT

1. The fact that a set of books shows the exact condition of the business is not sufficient. The books must be logically planned and kept, and the ledger should be so arranged as to exhibit the business records in proper sequence. The space in the ledger should be properly apportioned, and each class of accounts should have a definite location, so that it will not be possible for any account to be overlooked. Accounts of a like nature should always be grouped together.

With these facts in mind there are here considered plans for the arrangement of ledger accounts that may be adapted to the needs of any business, whether large or small. Of course the order given is not always followed, but whatever plan is used should be logical and then followed out systematically. Some accountants begin with fixed assets and end with current assets or cash, and others follow the reverse order, beginning with those most readily available and ending with the least available. The liabilities then follow in succession, but in like order with the assets. Many prefer to have the capital accounts at the beginning of the ledger, yet others list them with the liabilities. The nominal or profit-and-loss accounts generally follow the assets and liabilities, and in turn should be logically arranged. The balance sheet and the statement

of profits and losses should also be arranged in a logical manner, similar to the plan followed in the ledger, and the trial balance should exhibit a like arrangement.

2. By means of the several accounts, the ledger furnishes a condensed summary of the business and represents as the *principal book* all other books that contribute to the history of the transactions.

The kind of accounts suited to the needs of the business should be determined first, and then these accounts should be classified and arranged in the ledger in a logical manner; also, unless the ledger is loose-leaf, the number of pages needed for each account should be decided on and left blank, depending, of course, on the number of years it is designed to last. It is advisable to leave a few pages between groups for the accommodation of new accounts, and the trial balance should make like provision for the listing of tardy arrivals.

3. The ledger accounts may be classified into three general groups and in the following order: *capital, real,* and *nominal accounts.* The real accounts are also known as *balance-sheet accounts,* and the nominal as *profit-and-loss accounts.* The outlines that follow are taken from actual business ledgers and may be expanded or condensed to suit individual needs, so long as the general groups are maintained.

1. *Capital Accounts.*—For a single proprietor, the capital account should be opened first, followed by the private or withdrawal account.

For two or more proprietors, separate capital accounts should be opened successively, followed by the private or withdrawal account of each.

For a corporation or a joint stock company, the capital account should be opened first, followed successively by unsubscribed stock, surplus, undivided profits, dividends payable, etc.

2. *Real Accounts.*—The section of the ledger for real accounts may be divided into three parts for further convenience, as follows: (1) Stocks and bonds (or other securities). bills and notes receivable, furniture and fixtures, real estate, bills payable and mortgages payable; (2) sales-ledger control-

ling account, containing book accounts receivable; (3) purchase-ledger controlling account, containing book accounts payable. If all personal accounts are placed in the ledger, they should follow the nominal accounts; then the controlling accounts would be omitted.

3. *Nominal Accounts.*—To show income and expenses incident to a retail or a jobbing business, ledger accounts should be opened in the following order: Merchandise sales, allowances on sales, freight and cartage outbound, merchandise (inventory), merchandise purchases, freight and cartage inbound, advertising, salesmen's salaries and commissions, sales expenses, insurance, real-estate expenses, office salaries, office supplies, office expenses. The foregoing accounts up to and including sales expenses may be closed into the trading account, and when such account is used it follows them in the ledger. Discount and interest (bank discount and use of money), management expenses, and bad debts follow in order, and the trading account when used is closed directly into the profit-and-loss account, which should include the group of nominal accounts. Sometimes the profit-and-loss account follows the capital group.

In a manufacturing business, it is necessary to open an account for material, supplies, factory wages or labor, factory expenses, and kindred charges. These accounts should be closed into the manufacturing account, and should precede the accounts that comprise the trading account or selling account as it is sometimes called. The manufacturing account, when used, closes into the trading or selling account. The balance of this account is closed into profit and loss.

4. Suggested Arrangement of Ledger Accounts.—The accompanying arrangement of ledger accounts will be found of practical value. If the personal accounts with customers and creditors are to be kept in the general ledger, they should be shown in the concluding part of the book, leaving as many pages as may seem necessary for each group. The accounts receivable may be placed near the center of the ledger, and they may be followed by the accounts payable, leaving enough pages for new accounts with customers.

Group 1 Capital Accounts	(*a*) Individual or partnership	Capital account (each proprietor) Withdrawal account (each proprietor)
	(*b*) Corporation or stock company	Capital stock Unsubscribed stock Surplus Undivided profits Dividends payable
Group 2 Real Accounts	(*a*) Assets	Real estate Plant and machinery Furniture and fixtures, etc. Stocks and bonds or other securities Bills receivable Sales-ledger controlling account
	(*b*) Liabilities	Bills payable Purchase-ledger controlling account Mortgage payable
Group 3 Nominal Accounts	(*a*) Manufacturing accounts	Material Supplies Factory wages Factory expenses and kindred charges
	(*b*) Trading accounts	Manufacturing account Sales account Returned sales and allowances Freight and cartage outbound Merchandise (inventory) Purchase account Returned purchases Freight and cartage inbound Advertising Salesmen's salaries and commissions Sales expenses Insurance (exclusive of real estate)
	(*c*) Profit-and-loss accounts	Real-estate expenses (taxes, water rates, insurance, interest on mortgage, and repairs) Office salaries Office supplies Office expenses Trading account Discount and interest (bank discount and use of money) Discount on sales Discount on purchases Bad debts Profit and loss

PHILOSOPHY OF ACCOUNT CLASSIFICATION

5. Purposes of Accounts.—Every account on the books should serve at least two distinct purposes, as follows:

1. It should, by its caption, indicate the nature of the transactions that it represents, and the effect of the transactions upon a business. These requirements are obtained from account classifications. For instance, a transaction—debit or credit—which affects the profit-and-loss account, should appear upon the ledger in a nominal account under a caption (or name) which clearly expresses its nature. Furthermore, the caption of the account should indicate the class of transactions that it exclusively covers. For instance, salaries paid to salesmen and commissions paid to salesmen denote *selling expenses* in both cases.

If the two items were charged to the one account, selling expenses, upon the ledger, the classification, selling expenses, would not provide the required analysis for the purpose of showing of what the expenses consisted. From this it is obvious that classifications serve the two-fold purpose of indicating the nature of an account, and grouping in a single account similar transactions of the same general nature. The purpose of such grouping is analysis.

2. The total of each account should represent a summary of similar transactions. A summarization of the totals of each account for similar transactions of the same general nature would, therefore, give the total transactions of the same general nature. Thus, the two accounts previously referred to, salaries paid to salesmen and commissions paid to salesmen, would—when totals were added together—that is, summarized, give the total transactions of the same general nature (selling expenses) in a form that would show the total of each.

6. Classification of Accounts.—It should now be clear that the determination of a classification for any account should be the result of careful consideration of the purpose for which the classification is made. It must be borne in mind that there are two final summaries—the balance sheet and the profit-and-

loss statement—which, respectively, exhibit the financial condition, and financial results of a business. Each account in the ledger must ultimately become a part of one or the other of these summaries. The natural points to consider, in determining an account classification, therefore, are:

(*a*) If the account is of a personal nature, a classification is not required, except in cases where different conditions—though they refer to the same person—apply to different transactions. For instance, if K. Small invested money in a business, and periodically drew amounts from the business, the capital invested and the periodical drawings would both relate to K. Small. In this case, analysis is required, which would necessitate two classifications:

1. K. Small, capital account.
2. K. Small, private or drawing account.

The analysis is required in order that K. Small may, at any time, readily ascertain what his drawings for a given period have amounted to, and in order that the effect of his drawings upon his capital account may be separately shown, when a financial statement of his business is prepared.

(*b*) If the account affects an asset or a liability, the questions to determine are: the extent to which it is necessary to provide subclassifications (analyses) for properly indicating the meaning which a classification should convey. For example, if K. Small purchased various properties, connected with his business, for $20,000, it would obviously be incorrect to classify the purchase under a single caption, such as:

Properties
$20,000

A separate classification would be required for each class of property, thus:

Lot
$5,000

Buildings
$12,000

Furniture and Fixtures
$500

Auto Truck
$2,500

The preceding four classifications show each class of property purchased, and their respective costs.

(*c*) If the account affects profit or loss (profit-and-loss statement) the question to determine is, the extent to which classifications of a similar nature require subdividing, so that separate classifications may be provided for transactions of the same kind. The profit-and-loss statement is relied upon to show all details necessary to explain clearly how the various factors of the business have affected the final result; therefore, it is vital that all important charges and credits be classified with a completeness which will enable thorough scrutiny of the nature of each item, and of the various classes of which it is composed, for each phase of the business.

The information to be gained from a comparison, period by period, of the elements of profit-and-loss statements is generally more important than is the case with a comparison of balance sheets. This is an additional reason for employing complete classifications, which may be continued from period to period.

Classifications are required upon financial statements, which, to some extent, serve purposes similar to those referred to in the foregoing. These relate, however, more particularly to the grouping of items upon the statements, for the purpose of indicating their nature and importance. For example, upon a balance sheet there might be

Current assets
Fixed assets
Deferred charges
Etc.

and,

Current liabilities
Funded debt
Capital stock
Surplus
Etc.

These classifications are not all specifically required for ledger accounts. They will be subjects for consideration hereafter.

IMPORTANCE OF ACCOUNT CLASSIFICATIONS

7. The tendency of modern commerce is to impose conditions, which, if they are to be successfully met, require the closest possible analysis of the various charges and credits which determine the profitable or unprofitable results from any business. If adequate classifications do not exist, the requisite analysis is not possible. Many account-keeping systems—excellent in other respects—are marred by the lack of proper account classifications and analysis. The object of account classifications is the accomplishment of the following:

(*a*) To designate the account clearly, so that its import may be understood without further explanation. For instance, the classification *Expense* immediately conveys its full meaning. There are numerous classes of expense, each requiring a classification; therefore, the classification, *Expense,* is known as a *controlling* classification.

(*b*) To designate the account as being a collection, or summary, of transactions which are of an identical character. For instance, the classification *Salaries* immediately conveys its full meaning, and it would be understood to be a subclassification of the controlling classification, *Expense,* just as though it was designated *Salaries* (*expense*).

(*c*) To divide the accounts so as to summarize separately the important transactions, which, when taken collectively, constitute the business. For instance, the classification *Merchandise returned* clearly expresses the meaning; but the account would not be properly divided, because it might include returned purchases as a credit, and returned sales as a debit. In this case, a balance of the account could not be entered upon a financial statement. It would be necessary to analyze the account, in order to summarize transactions of a like character. The requisite classifications are Returned sales and Returned purchases.

(*d*) To provide a distinct point to which all transactions may be directed and summarized, for the purpose of ascertaining the results from a particular part of a business. For instance, if a business consisted of buying and selling two

distinct lines of commodities, information would naturally be required from the accounts as to the profitable or unprofitable results from each. If it be assumed that the two commodities are respectively represented by C 1 and C 2, account classifications will be required for analyzing and summarizing the important transactions that constitute the business of C 1 and C 2. Such classifications would probably include the following, and any other classification that the business might require:

Governing classifications C 1, C 2.

Then, the various subclassifications for each governing classification would serve the purpose of identifying the charges and credits applicable to the business of "C 1" and "C 2." Thus:

Merchandise purchases, C 1.
Merchandise purchases returned, C 1.
Cash sales, C 1.
Credit sales, C 1.
Sales returned, C 1.
Discount on purchases, C 1.
Discount on sales, C 1.
Expense, C 1.
Rent, C 1.
Salaries, C 1 (subclassifications of expense).
Etc., etc.

The foregoing classifications are merely a few of what are usually required. They suffice, however, to show the principle involved; namely, that the important charges and credits must be separately accounted for, either for the business as a whole, or for each particular part (or department), if such exist.

IMPORTANCE OF ACCOUNT CLASSIFICATIONS AND ANALYSIS DEMONSTRATED

8. By way of demonstrating the importance of account classifications, and analysis, the figures as given in Figs. 1 and 2 are assumed to be facts:

9. For the purpose of simplicity, it is further assumed that the foregoing accounts cover all transactions during a given period, and that a profit-and-loss account is required for the period.

EXPENSE ACCOUNT
(As it appears upon a ledger)

	Dr.	Cr.
Rent (particularized, but not summarized if paid in more than one payment	$6,000.00	
Salaries and wages (particularized, but not summarized)	11,385.00	
Sundry expenses (each item particularized, but similar classes are not summarized)	4,356.40	
Telephone charges refunded		$ 3.85
Balance carried down		21,737.55
	$21,741.40	$21,741.40
Balance brought down	$21,737.55	

FIG. 1

MERCHANDISE ACCOUNT
(As it appears upon a ledger)

	Dr.	Cr.
Inventory beginning	$50,211.10	
Purchases, returned sales, allowances, etc., each item particularized, but not in a summarized form	307,411.91	
Sales, returned purchases, etc., particularized, but not summarized		$382,142.60
Inventory, ending		26,175.90
Profit and loss, balance	50,695.49	
	$408,318.50	$408,318.50
Inventory, brought down	$26,175.90	

FIG. 2

After closing the expense account and transferring the balance shown upon the merchandise account, a profit-and-loss account, upon the ledger, would show the facts as given in Fig. 3.

PROFIT AND LOSS

	Dr.	Cr.
Expenses	$21,737.55	
Merchandise account		$50,695.49
Balance, profit, carried down	28,957.94	
	$50,695.49	$50,695.49
Balance, profit, brought down		$28,957.94

FIG. 3

10. It should be apparent that, although the amount stated as profit in Fig. 3 is quite correct, no information is given that would enable a manager or proprietor to examine the result,

for the purpose of determining whether all the important factors contributed satisfactorily to the total result.

It will be observed that the illustration covers only two classifications of ledger accounts: (1) Expense; (2) Merchandise.

In order to prepare a profit-and-loss statement which will satisfactorily exhibit the results from the business, it is necessary to analyze the two accounts. Assume the analyses given in Figs. 4 and 5 to be true.

Analysis of Expense Account

		General Office	Sales Office
Rent		$3,240.00	$2,760.00
Salaries		5,900.00	4,000.00
Commissions			1,575.00
Wages		760.00	725.00
Sales office	$360.50		
Telephone, Less credit	3.85	240.75	356.65
Telegrams		21.20	42.60
Postage		622.80	819.25
Stationery and printing		137.15	510.60
Sundry items, not classified		12.19	14.36
Total ($21,737.55)		$10,934.09	$10,803.46

Fig. 4

Analysis of Merchandise Account

	Debits	Credits
Inventory, at commencement	$ 50,211.10	
Purchases	304,359.71	
Sales returned	1,520.50	
Allowances on sales	317.10	
Loss—Goodrich & Co. shipment destroyed, not compensated by insurance	1,214.60	
Sales		$381,612.40
Purchases returned		530.20
Inventory, ending		26,175.90
Profit and loss	50,695.49	
Totals	$408,318.50	$408,318.50

Fig. 5

From the analyses, it is now possible to prepare the profit-and-loss statement given in Fig. 6.

PROFIT-AND-LOSS STATEMENT

Sales. Gross amount		$381,612.40	
Deduct: Returns	$1,520.50		
Allowances	317.10	1,837.60	
Net sales			$379,774.80
Cost of sales:			
Merchandise inventory at commencement		$ 50,211.10	
Merchandise purchases	$304,359.71		
Less returns	530.20	303,829.51	
Deduct:		$354,040.61	
Merchandise inventory ending		26,175.90	
Cost of sales			327,864.71
Gross profit			$51,910.09
Expenses:			
Selling expenses:			
Rent of sales offices	$2,760.00		
Salaries	4,000.00		
Commissions	1,575.00		
Wages	725.00		
Telephone	356.65		
Telegrams	42.60		
Postage	819.25		
Stationery and printing	510.60		
Sundry expenses, unclassified	14.36		
Total selling expenses		$10,803.46	
Administrative expenses:			
Rent of offices	$3,240.00		
Salaries	5,900.00		
Wages	760.00		
Telephone	240.75		
Telegrams	21.20		
Postages	622.80		
Stationery and printing	137.15		
Sundry expenses, unclassified	12.19		
Total administrative expenses		$10,934.09	
Total selling and administrative expenses			$21,737.55
Net profit from merchandise			$30,172.54
Deduct:			
Extraordinary loss—			
Shipment, to Goodrich & Co. destroyed, not covered by insurance, or otherwise compensated for			1,214.60
Net profit for the period			$28,957.94

FIG. 6

All of the accounts required for the profit-and-loss statement should appear upon the ledger under separate classifications, in fact, additional classifications would be appropriate in some instances.

For example:

If sales were not all made on credit—some being for cash—the two classes of sales should appear separately upon the ledger.

The amounts charged for salaries should be divided, to show separately the amount paid to officials and the amount paid for the services of salesmen and clerks. The amounts charged for wages should be divided to show separately the class of service rendered—as drivers, watchmen, etc.

11. A comparison of the unclassified profit-and-loss account shown upon the ledger, Fig. 3, with the detailed profit-and-loss statement, Fig. 6, made possible by an analysis of the former account, shows the following:

1. The net results shown by the two statements are identical.

2. The unclassified statement is valueless to a manager, because it does not exhibit any details necessary for a comprehension of the factors involved in the result.

3. The classified statement exhibits details, which may be amplified (as previously mentioned), explanatory of the factors involved, so that they may be compared, period by period, with previous results. In addition, the fact is disclosed that an extraordinary loss of $1,214.60 occurred by reason of failure to insure a shipment to a customer. This fact, if not properly accounted for upon the ledger, would have escaped the attention of a person viewing a statement prepared from the ledger.

It is obvious that, if accounts are adequately classified, they present an adequate analysis, and that the principles herein expressed may be applied to any required extent.

12. If, as previously referred to, a business includes two or more distinct lines of commodities each of which is affected

by particular expenses and selling values, it is imperative that the charges and credits applying to each commodity be kept under separate classifications. Then, at the end of any given period, a summary of transactions for each commodity would be obtainable from the various classifications, and the profitable or unprofitable results from each could be ascertained. The reason for stating this procedure to be *imperative,* is, there is always the possibility (generally a probability) that a particular commodity may be responsible for an absolute loss, or insufficient profit, which would not be disclosed if the accounts merely showed results for the business as a whole.

Briefly stated, the effect of classifying accounts for the purpose of determining profits or losses from each particular line of commodities is the same as would be obtained if the nominal or representative accounts for each (sales, purchases, expenses, returns, allowances, etc., in fact, all accounts except cash and personal accounts) were kept upon separate ledgers.

13. It must be understood that in some instances it may not be possible to apply accurately a particular transaction to a particular commodity, because the transaction may be for the account of more than one commodity. A charge for rent, for instance, may not be accurately divisible. It is possible, however, to divide it with a reasonable degree of approximation, upon a basis shown by conditions to be fair.

The foregoing considerations do not apply to the classification of accounts usually required for the purpose of indicating the position of an account upon a ledger. In a large business there may be very many accounts requiring numerous classifications. In such a case, it is frequently necessary to classify the accounts by means of numbers, letters, or a combination of both. The purpose of such classifications is to indicate the account, without the clerical effort required for writing the name of the account in full for each transaction.

TRIAL BALANCE

14. In double-entry bookkeeping, the debits and credits of the ledger are supposed to be equal; consequently, the ledger is said to be constantly in balance. A trial balance is made from time to time for the purpose of testing its equilibrium, and it contains a schedule of all accounts remaining open at a particular time. While the trial balance is designed primarily as a ledger test, it serves another purpose also. The items compose a summary of the ledger accounts, and thereby present in a condensed form amounts that convey considerable information to the proprietor of the business. Instead of having monthly business statements made out, as is frequently the case, the desired information can be obtained from the trial balance. The arrangement of ledger accounts should of course be systematic, in order that accounts showing like results may be in groups. The same order should obtain in the trial balance as in the ledger, as it will facilitate work at the end of the year when statements and closing entries are being made. It should be taken off at least once a month, if not more frequently, in order to be sure that the ledger is in balance; but, of course, the fact that it is in balance does not mean that errors have not been made. It is possible that entries may have been posted to the wrong accounts, that computations have been wrongly made, etc. Sometimes errors that offset one another are made, and these may not be detected when the trial balance is made. For example, an error on the debit side may be offset by a corresponding error on the credit side. As a precautionary measure, frequent checking of entries should be made by the bookkeeper, in order to be sure that the entries are made properly and to the proper accounts.

15. In setting up the trial balance, it is advisable to leave occasional lines vacant for the insertion of accounts that may be opened during the year. A similar space is left in the ledger for the accommodation of tardy arrivals, and, of course, the corresponding location should be taken. Trial-balance books ranging in size to meet the needs of any business may

be obtained at stationery stores. Such books sometimes have a page or two at the back for the recapitulation of totals from the various sheets, in case the trial balance covers several pages. In such a case, each page is added and carried separately to this summary. Sometimes the various pages are added together cumulatively; that is, the total from the first page is carried on to the second, the total of the second, in turn, to the third, and so on. When this plan prevails, however, an error on the first page necessitates an alteration of amounts in all the subsequent pages. This is obviated, as will be seen, by carrying the total of each page separately to a recapitulation. The totals of the various pages added together give the grand total of the trial balance. This is continued across the page from month to month, as shown in Fig. 7.

ELEMENTS OF INCOME AND EXPENDITURE

16. Sources of Income and Expense.—The income of a trading business is generally derived from sales of goods, from interest and discount, from dividends on investments, etc. Offsetting the income are, of course, the cost of merchandise sold and the various selling and administrative expenses, the balance being the net profit or the net loss. In order to show this profit or loss, the various accounts concerned are closed at regular intervals. At that time only the nominal or profit-and-loss accounts are adjusted or closed. The elements composing these accounts follow.

17. Elements of Income.—In the following list are included some of the more common items of income to be found in a trading business; that is, one that conducts the purchase and sale of merchandise but does no manufacturing. The manufacturer, of course, must first have taken the raw materials and made them into the finished product for the merchant. The elements here given will be used for developing the accounts later on.

Sales of merchandise
Sales of supplies
Income from investments
Interest and discount
Miscellaneous

Recapitulation of Trial-Balance Sheets

Page	January 31, 1923		February 29, 1923		March 31, 1923		April 30, 1923	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
1	$ 98,329.40	$116,988.40	$ 92,377.47	$111,376.77				
2	43,624.85	39,464.70	59,868.71	70,121.60				
3	74,310.35	26,342.15	63,998.90	32,868.21				
4	52,143.90	82,971.27	59,864.13	93,986.73				
5	39,218.16	41,860.14	67,321.14	52,488.18				
6			17,411.14					
	$307,626.66	$307,626.66	$360,841.49	$360,841.49				

Fig. 7

18. Manufacturing Costs.—In a manufacturing business costs applicable to factory operation, that is, costs of converting raw material into finished product, are considered manufacturing costs and are summarized in the manufacturing account. The usual costs incident to manufacturing are as follows:

Raw material	Insurance
Productive labor	Repairs
Non-productive labor	Depreciation (machinery, tools, and equipment)
Superintendence	Depreciation (factory buildings)
Light, heat, and power	Royalties
Supplies	Patents (proportion of total value)
Rent	
Taxes	

19. Costs and Direct Trading Charges.—Under costs and direct trading charges are included the charges that comprise the cost of merchandise purchased up to the time when the goods are ready for sale. They are as follows:

Purchases of merchandise	Warehouse wages and expenses
Commission to purchasing agents	Warehouse supplies
Freight inbound	Other direct charges
Duties and entry charges	

20. Selling Expenses.—The selling expenses include the expenses incurred in disposing of the goods. When they are properly recorded, it is possible to determine the exact cost incurred in disposing of the merchandise. The expenses listed following may not all be found in any one business, and some of them even may be modified considerably.

Wages of salesmen	Delivery expenses
Expenses of salesmen	Expenses of packing and shipping
Commissions to salesmen	Storage charges
Traveling expenses of salesmen	Rebates and allowances
Samples of goods	Discounts on sales
Advertising	Rent of store and warehouse
Freight outbound	Insurance of stock, etc.

21. General and Administrative Expenses.—The general and administrative expenses have reference to the general management expenses of the business, such as the salaries of the managers and office employes and the various office expenses

that cannot be definitely apportioned. In addition to these, there are general expenditures that are chargeable to the business as a whole, as insurance, depreciation, bad debts, interest, and discount. Some of the accounts included in this list are:

Salaries to officers and managers	Interest and discount
Salaries to office employes	Depreciation of properties
General business expenses	Light, heat, and power
General office expenses	Taxes, insurance, and subscriptions
Traveling expenses	Donations and contributions
Office supplies and postage	Rent of offices
Telegraph and other charges	Discount on sales
Stationery and printing	Miscellaneous charges

22. Subdivision of Charges.—The items just mentioned may be contained in separate accounts, or several of a like nature may be included in one account. The size of the business and the number of bookkeepers will govern to some extent the advisable subdivisions; yet it is prudent, even in a small business, to have the accounts so classified that full information pertaining thereto can be obtained without too much delay. Specific details are not entered into in the explanations. Brief details of a few accounts and the conditions under which they are debited and credited follow, but it is obvious that all the accounts need not be presented, as most of them are handled in the same manner. These explanations pertain to the ledger accounts and to the manner of closing them. The preparation of statements is explained and illustrated separately.

23. Merchandise Account.—All students of accountancy are probably familiar with the merchandise account which still exists in bookkeeping practice sets and in the books of some of the smaller business concerns. When it exists, it is used as a gathering account for all of the items affecting gross profits on merchandise, and it contains a number of unclassified facts, so that it must be carefully analyzed in order to show how the gross profit is calculated. Modern accounting practice frowns upon the use of such an account, and advocates opening an account with each component of the so-called *merchandise* account. The most common compo-

nents which are grouped in the merchandise account and for which separate accounts are now generally used, are merchandise inventory, purchases, freight and cartage in, sales, returned purchases, and returned sales.

24. Merchandise Inventory Account.—The merchandise inventory account is debited with the inventory at the end of the accounting period, the offsetting credit being made to the trading account. For the purpose of illustration, assume that the inventory on December 31, 1922, which is the end of the accounting period, is $10,000. The journal entry for recording this in the accounts would be as follows:

Merchandise inventory	$10,000	
Trading account		$10,000
To record the inventory of December 31, 1922		

The merchandise inventory account will then stand with a debit balance of $10,000 until the close of the next accounting period, when this balance is closed out to the trading account by the following entry:

Trading account	$10,000	
Merchandise inventory		$10,000
To close merchandise inventory account		

25. Purchase Account.—The purchase account is charged with all purchases of merchandise purchased for resale, and with the cost of freight and cartage in, as shown by the freight and cartage account. In a manufacturing business the purchase account is charged with purchases of raw material. It is credited with returned purchases as shown by the returned-purchases account, also with allowances for damaged goods, rebates, etc. When these items have all been included in the purchase account, the balance shows the net purchases for the period and is closed out to the trading account.

26. Sales Account.—The sales account is credited with all sales of merchandise or finished goods. It is debited with sales returned by customers and with allowances, as shown by the returned sales and allowance account, which account is closed into the sales account at the end of the period. The balance is a credit and is closed out to the trading account.

27. Freight and Cartage In.—The freight and cartage-in account should be charged with all amounts paid for freight on merchandise or raw material purchased. It should also be charged with cartage and handling costs necessary in placing the materials in stock. As all such charges are considered a part of the cost of goods, the balance of the account should be closed into the purchase account at the end of the period so that that account will be charged with the total cost of purchases.

28. Returned Purchases and Returned Sales and Allowances Account.—As is indicated by the names of the returned purchases and returned sales accounts, they should record all returned purchases, returned sales, and allowances. As such returns and allowances reduce the amount of purchases and sales shown by the purchase and the sales accounts, it is obvious that when closed out to the purchase and the sales accounts, those accounts will show net purchases and net sales.

The returned purchases account should be credited with all purchases returned and allowances made to the firm for defective or damaged goods, the offsetting debit being to the firm from which the purchase was made.

The returned sales account or returned sales and allowances account, as it is sometimes called, should be charged with all sales returned and allowances for damaged or defective goods made to customers, the offsetting credit being to the customer's account.

29. Interest and Discount.—*Interest* is the allowance made or money paid from one person to another for the use of money or credit. *Discount* is an allowance made for the payment of a debt before it is due. The use of money has a current market value, as indicated by the prevailing rate of interest, and the person deprived of the use of his money for any length of time is entitled to compensation for its use from the person holding or using it. Interest and discount are practically synonymous terms, and they are so used in business. There is, however, a distinction to be drawn between the different kinds of discount. *Bank discount* has reference to inter-

est or discount allowed to the bank or to individuals, and it is usually computed at a certain rate per cent. per annum. *Trade discount* has reference to a trade or a general discount allowed by merchants to their customers. Such discounts are not taken into consideration in the accounts, but are treated as deductions from purchases or sales prices. They should not be confused with *cash discount,* which has reference to deductions made from invoices for prompt payment within a specified time, as 10 days, 20 days, etc. The purpose of trade discounts, which are usually quoted in series such as 60, 30, and 10—50, 10, and 5, or some other combination, is to express fluctuations from list prices given in catalogs. A change in price is expressed by a change in one or more of the discounts, 50, 5, and 5, instead of 50, 10, and 5, for example, would indicate a slight increase in price; whereas, if this method or a similar one were not used, a change in prices would invalidate the list prices in the catalog and necessitate reprinting it. Discounts are not printed in the catalogs but are issued in supplementary form from time to time, either in pamphlets or directly on invoices.

Cash discounts are of two kinds: discounts on sales and discounts on purchases. Separate accounts should be maintained for each. Such discounts should be taken into account on the books, because they are regarded as interest earned or paid for the use of money. A considerable difference of opinion exists among accountants as to whether cash discounts should be considered as a reduction in the price of goods or as financial earnings and expenses. The majority of accountants, however, prefer the latter treatment because the primary purpose of such discounts is to stimulate the customers to pay their bills promptly, and the discounts are, therefore, premiums paid for the use of money.

There are several different ways of recording cash discounts in the cash book. Two of the most common methods are explained in connection with the cash book form shown in the succeeding Section.

Interest and bank discount should be recorded in a separate account under the caption of *Interest* or *Interest and Discount.* Interest received should be credited to this account and interest

paid should be charged to it. If the account shows a debit balance, the amount indicates the excess of interest paid over that of interest received. The account is closed to profit and loss, and would appear on a statement as a deduction from profits. If the account shows a credit balance, it is also closed to profit and loss, but appears on statements as an earning and is added to profits.

30. Accrued Interest.—Instead of entering accrued interest into the interest account, these items are frequently entered into special accounts used for that purpose, as accrued interest receivable (or payable). In these accounts should be entered all interest accrued at the time of closing. For example, suppose that \$50 interest has accrued on a mortgage payable at the date of closing. This amount should be charged against the profits of the past period, and in order to effect the charge the following entry should be made before closing the interest account:

Interest	\$50.00	
Accrued interest payable		\$50.00
To record interest accrued on mortgage to date		

The Accrued Interest Payable account then remains open on the books and appears in the balance sheet as a liability. Then, if a full interest instalment, amounting to \$100 and including the \$50 already charged in the foregoing entry, is due a month later and is paid in cash, the following entry should be made:

Accrued interest payable	\$50.00	
Cash		\$50.00

Thus the liability is cancelled and a charge of only \$50 is made to the period in which the payment is made; whereas, if the first entry had not been made, the profits of the previous period would have been increased by \$50 and the profits of the period in which the payment was made would be charged with an undue proportion of interest. If interest receivable has accrued, an entry should be made charging the amount to Accrued Interest Receivable and crediting it to the interest account.

DEFERRED CHARGES AND DEFERRED CREDITS

31. Explanation.—The classification of items upon a balance sheet is equally as important, if not more important, than the classifications used upon the accounts from which the balance-sheet items are obtained. If the ledger accounts are held under captions that fully explain the nature of each account, the question of providing a proper classification upon the balance sheet often extends to a grouping of several balances under one classification. This applies particularly to balances of accounts which, for sundry reasons, represent expenditures having the dual characteristics of an asset and of expense, on the one hand, or of a liability and of profit on the other.

32. Deferred Charges.—The classification, Deferred Charges, is particularly appropriate when it designates operating expenditures made for the exclusive benefit of future periods. Under these conditions, the term Deferred Charges, on the asset side of a balance sheet, intimates that the item is expected to be realized only by charging it as an operating expense of the period for which it was incurred.

Items of the above stated character are often classed, upon a balance sheet, as *deferred assets, deferred debits, prepaid expenses.* These various classifications do not always cover items which are to be disposed of similarly. A deferred asset or a deferred debit may not always be a deferred charge, or a prepaid expense, although items under each classification would be included with the assets upon a balance sheet.

For instance: An insurance fund, maintained by a concern for carrying its own insurance, would appropriately be classified as a deferred asset. It would not be appropriately classified as a deferred debit, a deferred charge, or as a prepaid expense. It is a deferred asset as long as the policy of own insurance is continued, because, it may be drawn upon at any time to meet a loss. The contingency deprives it of value for current purposes. On the other hand, if a manufacturer commenced the construction of, say, a power plant, and abandoned the construction because a supply of power was offered on lower terms than

he could supply it, the abandoned capital—if useless for other purposes—would not be properly classed as a deferred asset, or as a deferred debit, or as a prepaid expense.

The classification Deferred Charges would more clearly define its nature; for, although it is not an expenditure directly connected with future operations, it was most certainly not incurred wholly in respect of current operations; it is, therefore, subject to arbitrary liquidation over a reasonable period. If the foregoing conditions applied to the accounts of a railroad, the abandoned expenditure would be classed as Unadjusted Debit, as provided by the standard forms required by the Interstate Commerce Commission.

33. Items entered with the assets upon a balance sheet, which are of a more or less intangible nature, and, therefore, require particular consideration with respect to classification, usually include some of the following:

Premiums paid on unexpired insurance
Rent paid in advance
Discount on issued bonds
Discount on issued capital stock
Interest paid in advance
Taxes paid in advance
Preliminary, or organization, expenses
Additions and improvements to leased property
Cost of experimental work

The items, in their listed order, are subject to a number of considerations in the matter of classification upon a balance sheet. These considerations will now be explained.

34. Prepaid Insurance.—As insurance premiums are usually paid for periods of from 1 to 5 years, it would manifestly be unfair to charge the period in which the payment is made with any larger amount of insurance than applies to that period. If each month constitutes an accounting period and an insurance premium covering a 3-year period beginning January 1, 1922, is paid January 5, 1922, an entry should be made on the credit side of the cash book charging Insurance, and giving an explanation as to what the charge covers and the period to

which it applies. This item is then posted to the debit side of the insurance account. In closing the books for the period, there are two ways in which the distribution of this expense to the proper period may be effected. If the amount of the premium is $720, the amount chargeable to each year is $240 and the amount chargeable to each period of 1 month, is $20.

On January 31, when the books are closed for the first period, a closing entry may be made in the journal as follows:

Manufacturing account or profit and loss	$20.00	
Insurance		
To charge insurance applicable to period		$20.00

35. When this entry has been posted, the debit balance of the insurance account is reduced by $20 and the profit-and-loss account is charged with the actual amount of insurance expiring during the month of January. If the $720 is the only item appearing in the insurance account, the debit balance of the insurance account indicating the portion of insurance unexpired, is $700. The account may now be ruled up and $700 brought below the ruling as an inventory. Following this procedure each month will result in reducing the unexpired insurance inventory by $20 each month, so that at the end of the 3-year period the entire amount will have been charged against profits.

36. Another treatment that accomplishes practically the same result, is to make an entry at the end of each period charging profit and loss with $20, as in the previous method, and charging a prepaid-insurance or unexpired-insurance account with the balance of the amount charged to insurance, thus closing the insurance account. After the books have been closed, the prepaid- or unexpired-insurance account, is then closed out to the insurance account. The only advantage of this method, which involves more detail, is that in preparing statements the unexpired insurance appears in an account the caption of which is explicit and leaves no room for doubt. If the bookkeeper is familiar with the former method, however, it is not likely that he will overlook or misplace the inventory amount, which should, of course, appear on the balance sheet under the caption of unexpired or prepaid insurance.

37. The foregoing explanation of the treatment of the insurance account illustrates the principle involved in the treatment of all deferred charges, deferred debits, etc. The detail of accounting treatment of the following items is, therefore, omitted.

38. Rent Paid in Advance.—Obviously, rent paid in advance would be appropriately classified as a deferred charge, or as a prepaid expense. Either classification indicates a temporary debit (assets) on the balance sheet, which is ultimately to be charged as an operating expense. The item is not a deferred asset, in the sense that an asset is deferred because of a contingency which may or may not occur to reduce its value, as in the case of an insurance fund, previously referred to.

39. Discount on Issued Bonds.—The item of discount on issued bonds would appropriately be classed as a deferred charge. It is not a prepaid expense in the sense that a prepaid expense is a definitely recurring expense—as in the case of rent, or insurance. It may be considered as a prepayment to the extent that it is usually treated as attaching during the life of the bonds, to be written off in equal instalments during the period, a balance at any time being applicable to the unexpired term of the bonds. It will be perceived that the item is not an asset having realizable value. For this reason it is not a deferred asset, nor does it cover a regular recurring expense. It is, therefore, a prepaid expense in a limited sense only. The term *deferred charge,* however, fully expresses its nature.

40. Discount on Issued Capital Stock.—With the exception that an item of the character of discounts on issued capital stock is incurred for the benefit of an indeterminate period (there being no fixed duration for the existence of capital stock issued) and that it is usually written off within a reasonable period, the same considerations apply as in the case of discount on issued bonds. This item often appears on the balance sheets of newly formed companies, but should not be carried for more than from three to five years.

41. Interest and Taxes Paid in Advance.—When interest and taxes paid in advance are undiminished by accruals, which should be separately stated on the opposite side of the balance sheet, the items are subject to the same considerations as stated in connection with premiums paid on unexpired insurance. The items would be appropriately classed as deferred charges, or as prepaid expenses, but not as deferred assets.

42. Preliminary, or Organization, Expenses.—As the caption indicates, organization expenses are incurred before a business is developed to the operating stage. In such a case, the expenditures may be considered to be for the benefit of the future life of the business, but, as the period of its life is not determinable, such expenditures are usually written off arbitrarily, within a reasonable period. The items have none of the characteristics of deferred assets, nor are they prepaid expenses, within the meaning of the term. They comply fully with the requirements for classification as deferred charges.

43. Additions and Improvements to Leased Property. An item having to do with additions and improvements to leased property would arise in a case where additions and improvements revert to the lessor at the expiration of a comparatively short lease, that is, for a term that does not greatly exceed the natural life of the additions and improvements.

In this case, although a tangible value is involved, the use of the value during the term of the lease is all that the lessee owns. The residual substance of the property is an asset of the lessor. For these reasons, the item is not a deferred asset, nor would it be satisfactorily classed as a prepaid expense. It would be appropriately classed as a deferred charge.

44. Cost of Experimental Work.—An item of the character of cost of experimental work would be assumed to represent expenditures of two distinct classes:

1. Expenditures that have not been capitalized, because not warranted by the results.

2. Expenditures for experimental work yet in process, to which a definite value cannot be given until completed. This may or may not be capitalized, depending upon results.

Any uncapitalized expenditures, not written off, will, of course, be deemed to be applicable to future periods. Expenditures that have been capitalized should be amortized over the period of their existing value—such as the life of a patent. In either case, the amount unamortized would be appropriately classed as a deferred charge.

45. Deferred Credits.—Items requiring entry upon the liability side of a balance sheet as deferred credits, should receive the same careful consideration with respect to classification as in the case of deferred charges upon the asset side.

In a general way, deferred credits will cover items of income received in advance, unearned at the date of the balance sheet. Interest, discount, rents receivable, etc., are items of the kind.

FORM OF THE PROFIT-AND-LOSS STATEMENT

46. Function.—The financial results from all classes of business are accounted for by two principal statements, a balance sheet and a statement of profit and loss. A balance sheet exhibits the assets and liabilities of the business, balanced by entry of the total shown upon the profit-and-loss statement. When these balance, the mathematical accuracy of both statements is indicated. The function of a balance sheet is confined to exhibiting the character and amount of each class of the assets and liabilities.

47. The proprietor of a business would not ordinarily consult a balance sheet for any other purpose than to examine the assets and liabilities. With respect to profits, the total amount shown upon a balance sheet does not interest him nearly so much as does information that shows the extent to which each division of his business has affected the total. It is the function of a profit-and-loss statement to exhibit the detailed information he requires. The completeness with which a statement performs its function, depends largely on its arrangement. Appropriate divisions are required, each conforming to and comprehending the details of, the divisions of the business. It is often desirable to extend the function of a profit-and-loss

statement, so that it may also show the amount of the undivided profits or of surplus as at the end of the period.

By way of illustrating the more important divisions that should be covered by a statement reporting profit and loss, the details that follow are assumed to apply to statements required for a manufacturing business, and for a mercantile business in which manufacturing is not done.

For a manufacturing business, the statement is usually designated as a Manufacturing and Profit-and-Loss Statement; for a mercantile business, the designation is Trading and Profit-and-Loss Statement. Both statements are expected to exhibit all information necessary for a critical examination of results.

48. Statement for a Manufacturing Business.—A manufacturing and profit-and-loss statement is required for the year 1921. It is to be prepared from the following condensed trial balance, and details at December 31, 1921.

Trial Balance, December 31, 1921

			Dr.	Cr.
Sales				$980,250.20
Returned sales			$6,810.35	
Allowances on sales			3,214.18	
Cash discount on sales			9,520.60	
Contract discount on sales			10,000.00	
Applicable to 1920 sales	$4,500.00			
Applicable to 1921 sales	5,500.00			
	$10,000.00			
Purchases			498,210.10	
Returned purchases				3,172.14
Expenses—Factory:			335,618.53	
Direct labor		$240,618.50		
Indirect labor		15,416.04		
Superintendence		8,000.00		
Rent		10,000.00		
Salaries		12,250.00		
Supplies purchased		2,324.26		
Delivery expenses, inward, not definitely assignable to individual purchases		4,116.08		
Expenses—Receiving department		3,920.04		
Carried forward		$296,644.92	$863,373.76	$983,422.34

Brought forward		$296,644.92	$863,373.76	$983,422.34
Expenses—Stores, raw material		4,220.10		
Light, heat, power, estimated		7,056.80		
Repairs—Machinery and equipment		3,120.40		
Depreciation—Machinery and equipment		18,560.11		
Insurance—Fire and liability		1,216.20		
Inspection		2,750.00		
Experimental		2,050.00		
		$335,618.53		
Inventories, December 31, 1920:				
Raw materials			$398,422.22	
Factory supplies			6,114.10	
Work in process, estimated			54,614.40	
Finished stock, estimated			42,820.14	
Sales of scrap material				320.04
Packing expenses			3,516.80	
Shipping expenses			4,116.16	
Salaries—Sales department			12,510.60	
Commission—Salesmen			8,160.40	
Traveling expenses—Sales department			3,250.50	
Advertising			7,418.49	
Rent—Sales office			2,000.00	
Expenses—Sales office			1,801.11	
Cash discount—Purchases				2,420.06
Interest from investments				4,250.00
Dividends from investments				3,180.75
Profit from sale of machine				185.00
Loss from sale of desk			25.50	
General expenses:			38,460.80	
Salaries		$20,000.00		
Rent		3,000.00		
Expenses		15,460.80		
		$38,460.80		
Sundry assets			553,395.02	
Sundry liabilities				881,105.01
Undivided profits, December 31, 1920				25,116.80
Surplus, December 31, 1920				100,000.00
			$2,000,000.00	$2,000,000.00

Inventories at Dec. 31, 1921, are:

Raw materials	$410,250.60
Factory supplies	6,724.26
Work in process, estimated	65,217.16
Finished stock, estimated	40,117.80
	$522,309.82

A manufacturing business, of the magnitude represented by the trial balance, would ordinarily have a more extensive classification of accounts, particularly with respect to sales, purchases, inventories, and expenses. It is, however, understood that a manufacturing and profit-and-loss statement should present results in a completely analyzed condition, so that the effect of each important factor may be exhibited. The given details are sufficient for the purpose of the following illustration:

Manufacturing, Profit-and-Loss, and Income Statement
For the Year Ended December 31, 1921

Sales—Gross		$980,250.20	
Deduct:			
Returns	$6,810.35		
Allowances	3,214.18		
Contract discount	5,500.00	15,524.53	
Net sales			$964,725.67
Cost of manufacture:			
Raw material used and in process:		$483,209.58	
Inventory, Dec. 31, 1920	$398,422.22		
Purchases	495,037.96		
	$893,460.18		
Inventory Dec. 31, 1921	410,250.60		
	$483,209.58		
Supplies used, and in process:		1,714.10	
Inventory, Dec. 31, 1920	$6,114.10		
Purchases	2,324.26		
	$8,438.36		
Inventory, Dec. 31, 1921	6,724.26		
	$1,714.10		
Total, Materials, and supplies (Forward)		$484,923.68	
Carried forward			$964,725.67

Brought forward		$484,923.68	$964,725.67
Direct labor		240,618.50	
Total, Materials, supplies, and direct labor		$725,542.18	
Factory expenses—Schedule No. 1		92,675.77	
Total materials, supplies, direct labor, and factory expenses		$818,217.95	
Deduct: Sales of scrap material	$320.04		
Increase in inventory of work in process	10,602.76	10,922.80	
Factory cost of finished goods		$807,295.15	
Add: Decrease in inventory of finished goods		2,702.34	
Factory cost of goods sold		$809,997.49	
Packing—Schedule No. 2		3,516.80	
Shipping expenses—Schedule No. 3		4,116.16	
Cost of goods sold (84.75%)			817,630.45
Gross profit—Factory			$147,095.22
Selling expenses—Schedule No. 4 (3.64%)			35,141.10
Selling profit			$111,954.12
Expenses of administration—Schedule No. 5 (3.99%)			38,460.80
Net profit from operations (7.62%)			$ 73,493.32
Other income credits:			
Cash discount from purchases		$2,420.06	
Interest from investments		4,250.00	
Dividends from investments		3,180.75	
Total, other income credits			9,850.81
			$83,344.13
Income charges:			
Loss—Sale of desk		$25.50	
Cash discounts on sales		9,520.60	
Total income charges			9,546.10
Net income			$73,798.03
Undivided profits, commencement of period			25,116.80
Other profit-and-loss credits:			
From sale of machine			185.00
Total			$99,099.83
Profit-and-loss charges:			
Contract discount on sales applicable to year 1920 not reserved for at Dec. 31, 1920			4,500.00
Undivided profits, at end of period			$94,599.83

After entry of the foregoing statement upon the books, a trial balance of the ledger would show as in Fig. 9.

TRIAL BALANCE

	Dr.	Cr.
Sundry assets	$ 553,395.02	
Sundry liabilities		$ 881,105.01
Inventories, Dec. 31, 1921:		
Raw materials	410,250.60	
Factory supplies	6,724.26	
Work in process, estimated	65,217.16	
Finished stock, estimated	40,117.80	
Undivided profits		94,599.83
Surplus		100,000.00
	$1,075,704.84	$1,075,704.84

FIG. 9

It will be noticed that the caption of the statement Manufacturing, Profit-and-Loss, and Income Statement, indicates three divisions, in the order named. The general form of the statement is used by professional accountants, in preference to the alternative of showing similar details arranged in the form of a ledger account, with balances brought down from one division to another. The simplicity of the statement is found in the fact that it develops each important stage of the results in an orderly manner, by additions and deductions, in a way that does not require a technical knowledge of account keeping in order to comprehend it.

49. Analysis of Statement.—In reviewing the foregoing statement, the following particular points are brought to notice:

Sales: Each class of items that is virtually a reduction of the selling price, is deducted from the gross sales in order to arrive at the net amount of sales. Extremely important factors are often developed by the separation. If the three factors in the illustration were combined as, Returns, Allowances, Etc.—$15,524.53, the information would not be satisfactory. One of the factors may be responsible for an abnormally large amount, while another may be subnormal. The former condition may have resulted from errors of shipment, defective goods, inferior packing, etc., which would probably escape attention if the total of the deductions happened to be normal.

Cost of Manufacture: The balances shown upon the trial balance illustrated indicate the absence of a cost system. It was, therefore, necessary to develop the factory cost in the manner shown upon the statement. Inventories of work in process and finished stock could not be accurately ascertained without the use of a cost system. They are, therefore, said to have been *estimated.*

If all necessary explanatory details were entered upon the statement, the relative importance of the principal factors would be somewhat obscured by an inconveniently long statement; therefore, subclassifications for important factors are shown upon schedules, made part of the statement. For example, Factory Expenses, Schedule No. 1, shown in Fig. 10.

Schedule No. 1—Details of Factory Expenses, Year 1921—$92,675.77

Indirect labor (Classification to be shown)	$15,416.04
Superintendence (Details)	8,000.00
Rent	10,000.00
Salaries (Details)	12,250.00
Delivery expenses—Inward	4,116.08
Expenses—Receiving department (Details)	3,920.04
Expenses—Stores department	4,220.10
Light, heat, and power (Details)	7,056.80
Repairs—Machinery and equipment	3,120.40
Depreciation—Machinery and equipment (Details)	18,560.11
Insurance—Fire and liability (Separate)	1,216.20
Inspection (Details)	2,750.00
Experimental (Details)	2,050.00
As above	$92,675.77

Fig. 10

Schedules Nos. 2, 3, 4, and 5 would be similarly required.

The stages developed by the statement from Cost of goods sold to Net profit from operations, show the effect of each important class of expense upon the gross profit. The percentages to sales, shown for these items, are generally closely examined by executives.

The amount shown as Net profit from operations includes only the profit derived from purposes for which the business exists. From this point, the statement accounts for income and expenditures of an exceptional character.

The illustrated statement ends with the amount of undivided profits at the end of the period, which would be transferred to a balance sheet, thus showing by a single amount the result which, otherwise, would require explanation somewhat as follows:

Undivided Profits		
Amount at December 31, 1920	$25,116.80	
Net income, year 1921, per statement	69,483.03	
		$94,599.83

50. Statement of a Mercantile Business.—The form of the statement shown in Fig. 11 is equally applicable for developing the trading profit, net profit, and net income of a mercantile business.

The statement exhibits results for three departments, with all details necessary for a critical study of each.

Supporting schedules giving details of subclassifications would ordinarily be required for the purpose of explaining further abnormal variations in the various percentages.

CLOSING THE BOOKS

51. At least once a year, and in most cases, oftener, it is customary to *close the books*. This is also known as *closing the ledger* and as *closing the accounts*. In many concerns where perpetual inventories are kept, monthly statements are desired and for this reason the books are closed each month. If a yearly closing is adhered to, as in the case of small mercantile and retail business houses, it is usually done at the end of the fiscal year, which may or may not be at the end of the calendar year. It is preferable to have the year end at a time when business is slack or when it is most convenient to take an inventory. In the coal business, for instance, the closing could be done most advantageously at a time when the coal supply is low, due to the fact that a physical inventory can be taken with less work than when a full supply of coal is on hand. At the time of closing, it is customary to prepare a profit-and-loss statement showing the

TRADING, PROFIT-AND-LOSS, AND INCOME STATEMENT
For the Year Ended December 31, 1921
(Figures are assumed)

	Total	%	Dept. A	%	Dept. B	%	Dept. C	%
Sales—Gross	$276,140.20		$114,116.30		$98,520.20		$63,503.70	
Deduct: Returns	8,210.18		4,214.70		2,122.22		1,873.26	
Allowances	4,056.12		1,925.18		1,416.10		714.84	
Deduction from sales	$12,266.30		6,139.88		$3,538.32		2,588.10	
Sales—Net	$263,873.90		107,976.42		$94,981.88		$60,915.60	
Cost of goods sold	146,718.10	55.60	65,117.10	60.31	57,114.80	60.13	24,486.20	40.20
Gross Profit—Trading	$117,155.80	44.40	$42,859.32	39.69	$37,867.08	39.87	$36,429.40	59.80
Expenses—(Assumed distribution):								
Selling expenses	$40,250.60	15.25	18,612.12	17.23	$12,720.14	13.39	8,918.34	14.64
Administrative expenses	22,116.40	8.38	11,410.30	10.57	7,122.60	7.50	3,583.50	5.88
Total expenses	$62,367.00	23.63	$30,022.42	27.80	$19,842.74	20.89	$12,501.84	20.52
Profits from Operations	$54,788.80	20.77	$12,836.90	11.89	$18,024.34	18.98	$23,927.56	39.28
(Percentages are of net sales)		100.00						
Other Income Credits (Details)	720.10							
	$55,508.90							
Income Charges (Details)	340.50							
Net income	$55,168.40							

FIG. 11

business operations for the year, as well as a balance sheet or a statement of condition showing the assets and liabilities of the concern and its net worth. This is all done, of course, for the benefit of the proprietors of the concern, whether it be owned by an individual, by partners, or by a corporation. Sometimes statements are made out monthly, quarterly, or half yearly for the purpose of supplying information for which the proprietor cannot conveniently wait until the end of the year. This does not mean that the ledger is to be closed, or any of the accounts affected, but simply that details are compiled from the books and presented in condensed form. Indeed, where the inventories can be determined from the books, without making a detailed valuation, a complete monthly profit-and-loss statement can be made with very little extra work. This depends, of course, on the bookkeeping system in use, and very largely on the ability and resourcefulness of the person in charge. When closing, it is customary to close all nominal accounts, that is, all accounts that show profits and losses, but before doing so it is necessary to determine all inventory valuations, accrued charges, allowances, etc. It does not seem necessary to close the accounts that show assets or liabilities, except at such times as they are balanced by settlement or adjustment, or when forwarding them to another page or to another ledger. If adjustments are made in an account, it is advisable at that time to rule up the account and then bring down the new balance as a beginning for future transactions. When all accounts showing profits and losses are closed into the profit-and-loss account, and the net profit, in turn, is closed into the proprietor's account, or into an undivided-profits account, the ledger is said to be closed. When this is completed, the ledger will again be balanced, but will contain open accounts only for assets, liabilities, capital, and profits. The closing feature is a process of elimination in order to determine the gain or loss, which, in turn, is either credited or debited to the proprietor's account.

52. When closing the ledger, it is necessary to transfer the gains and losses to the profit-and-loss account, and sometimes

it is necessary to transfer balances or totals of accounts from one page to another. The transfers may be made on the face of the ledger without any supporting journal entries or explanations, but this is not good practice. Every ledger entry should be supported by a full explanation. Consequently, closing entries and transfer entries should always be made in the

JOURNAL ENTRIES TO CLOSE THE LEDGER
September 30, 1921

(1)	Trading	$2,400.00	
	Purchases		$2,400.00
	To close purchases account.		
(2)	Sales	1,200.00	
	Trading		1,200.00
	To close sales account.		
(3)	Trading	650.00	
	Profit and loss		650.00
	Profit of trading transferred to profit and loss.		
(4)	Profit and loss	410.00	
	Rent		50.00
	Office expenses		60.00
	Advertising		60.00
	General expenses		40.00
	Salaries		200.00
	To close the above accounts.		
(5)	Profit and loss	240.00	
	To surplus		240.00
	To close net profit profit into the surplus account.		

FIG. 12

journal and posted from it to the respective ledger accounts. In this way, every transfer or adjustment entry can be accompanied by details giving reasons for its existence. In some cases the explanation may be very brief. It is advisable, however, to make entries and explanations so clear that they will be intelligible to others who desire to make reference thereto. Fig. 12 will serve to show examples of such closing entries.

THEORY OF ACCOUNTS
(PART 4)

DEPRECIATION, APPRECIATION, RESERVES, AND SURPLUS

DEPRECIATION

1. Depreciation has reference to the reduction in value of assets, as buildings, equipment, machinery, tools, and other fixed assets of a business. As destruction is a law of nature, all property, with the possible exception of land, must inevitably reach the end of its usefulness. Of course, this end may be delayed to some extent by repairs and improvements; yet it cannot be prevented. For this reason, it is very important that the matter of depreciation be taken into account, especially in connection with fixed assets.

2. Causes of Depreciation.—The causes of depreciation are wear and tear of assets in use; rusting, rotting, and decay; consumption and loss; obsolescence; and change of fashion. Wear and tear is the gradual destruction of the property in the operation of business, and in the case of machinery or equipment designed for manufacturing purpose, it is a part of the cost of production. Rusting, rotting, and decay deteriorate and destroy property whether in use or not. In fact, machinery deteriorates more rapidly as a rule when it is standing idle than when it is in use and is being properly cared for. Consumption and loss of minor tools and sundries is inevitable. In many cases these cannot be accounted for. Obsolescence refers to the disuse of machinery or equipment, owing to its

necessary replacement by the more modern invention. This is a condition brought about by the onward march of improvement in all mechanical lines and by the sharp competition in progressive undertakings. Changes of fashion and of condition cause depreciation or fluctuation downwards in value by the constant demand for new things, by which the older are pushed aside and the equipment necessary for their production disused. This is apparent in the case of department stores where special sales are advertised from time to time as a means of clearing out the old stock of goods.

3. Care of Depreciation.—Depreciation must be taken care of, or it will absorb the capital investment. It is in fact expired capital outlay that must be charged either to production or to profit and loss. In the case of short-lived machinery or tools that are exhausted in production, it is proper to charge the depreciation as part of the cost of manufacture by charging the estimated depreciation to the depreciation account and crediting a like amount directly to the asset account to which the depreciated articles were originally charged. Thus, if machinery and small tools, as just described, were charged to a machinery and tools account, depreciation should be debited and machinery and tools credited in the journal. The depreciation account would then be closed to manufacturing by debiting manufacturing and crediting depreciation.

METHODS OF CARING FOR DEPRECIATION

4. Various methods are employed in caring for depreciation, each of which has its merits. They are known as: (1) The *straight-line method;* (2) the *reducing-balance method;* (3) *substitute for the reducing-balance method,* and (4) *composite-life method.*

5. Straight-Line Method.—The application of the straight-line method is as follows: Let it be assumed that the original cost of a machine is $1,000, that it has an estimated life of 10 years, and that its residual value will be $100. It is evident that, in all, $900 will be charged off.

By the straight-line method, this amount will be spread equally over the 10 years. Accordingly, each year $90 will be charged into operating expenses by debiting depreciation and crediting the machinery account. The machinery account for the machine in question at the end of 10 years will be as shown in Fig. 1.

MACHINERY ACCOUNT

Cost of acquisition	$1,000.00	1.	By depreciation	$90.00
		2.	By depreciation	90.00
		3.	By depreciation	90.00
		4.	By depreciation	90.00
		5.	By depreciation	90.00
		6.	By depreciation	90.00
		7.	By depreciation	90.00
		8.	By depreciation	90.00
		9.	By depreciation	90.00
		10.	By depreciation	90.00
			Balance—Residual value	100.00
	$1,000.00			$1,000.00
Balance	$100.00			

FIG. 1

6. Reducing-Balance Method.—By the reducing-balance method, depreciation is charged off on the basis of a fixed percentage of diminishing values. Therefore, the heaviest charges are placed on the earliest years of a machine's life, the theory being that repairs and maintenance charges increase from year to year, thus tending to offset depreciation during the last 5 years of the life of the asset. The application of this method necessitates the use of a simple formula as follows:

$$x = 1 - \sqrt[a]{\frac{b}{c}}$$

In which x = desired percentage;
a = life in years;
b = residual value;
c = cost of asset.

The use of the formula is illustrated by the following example: a machine costing $1,024, with an estimated life of

5 years, and a residual value of $243. Substitution of the values in the formula gives:

$$x = 1 - \sqrt[5]{\frac{243}{1{,}024}} = 1 - \tfrac{3}{4} = \tfrac{1}{4}, \text{ or 25 per cent.}$$

By applying this rate to the original cost of $1,024, the following yearly depreciation charges are secured:

First year—25% of $1,024=	$256
Second year—25% of $768=	192
Third year—25% of $576=	144
Fourth year—25% of $432=	108
Fifth year—25% of $324=	81
Total depreciation	$781
Salvage value	243
Original cost	$1,024

7. Of the two methods, the latter seems to be the most logical since it distributes the burden more equitably and at all times provides for a residual value. It throws the heaviest charge for depreciation on the first few years and then gradually decreases as the efficiency of the property decreases. The increased outlay for repairs during the last few years of the life of the machine tends to equalize the heavy charge for depreciation during the early years. Repairs should, of course, be charged to the repairs account and then closed off into profit and loss. Additions or permanent improvements should be charged to the property account and then subjected to the same process of depreciation as the original property.

8. Substitute for the Reducing-Balance Method.—In order to avoid the use of the somewhat complicated formula just shown, a substitute method that gives fairly accurate results has been devised. This method is known as the *substitute-for-reducing-balance method,* and, as with the reducing-balance method, its application throws the heaviest depreciation charges on the earliest years of the machine's life.

In the operation of the substitute method, the estimated life of the machine is first determined and then used in constructing a continually reducing fraction, having as its denominator the sum of the figures of the machine's life. For example, assume

that a machine costing $1,100 has a residual value of $250, and an estimated life of 8 years. The fractional formula for this case is expressed as follows:

1 year
2 years
3 years
4 years
5 years
6 years
7 years
8 years
——
36 years = denominator of fraction

The total depreciation to be charged off is $1,100 − $250, or $850. At the end of the first year $\frac{8}{36}$ of $850, or $188.89, will be charged off, at the end of the second year $\frac{7}{36}$, the third year $\frac{6}{36}$, etc.

9. Composite-Life Method.—The composite-life, or dollar-years method, calls for a classification of assets at cost minus the salvage value, and of the ages of the various classes. It is suitable to a business having a wide variety of assets, subject to different conditions, and consequently, to different rates of depreciation. This method is widely used by public-utility concerns. To illustrate the application of this method, assume that a company has machinery costing $25,000, with an estimated life of 10 years and a scrap value of $2,000; buildings costing $12,000, with an estimated life of 30 years, and a residual value of $1,000; and delivery equipment that costs $6,000, having a scrap value of $500, and an estimated life of 6 years. To ascertain the rate the following tabulation is employed:

Life	*Cost*	*Residual Value*	*Total Depreciation*	*Times Replaced*	*Total Expense*	*Dollar-Years*
10	$25,000	$2,000	$23,000	3	$69,000	$690,000
30	12,000	1,000	11,000	1	11,000	330,000
6	6,000	500	5,500	5	27,500	165,000
	$43,000	$3,500	$39,500		$107,500	$1,185,000

$1,185,000 ÷ $107,500 = 11.02
$39,500 ÷ 11.02 = $3,584.39 annual charge.

The total dollar-years are divided by the total expense to secure the rate, and this, in turn, is divided into the total depreciation to secure the annual charge.

10. Reserve for Depreciation.—The more generally approved method of entering depreciation on the books is to set up a reserve account and to credit it each year with the amount written off, making a corresponding charge to depreciation. By this method, both the property account and the reserve-for-depreciation account stand open on the books and in the trial balance. In the balance sheet, however, it is desirable to show the reserve deducted from the assets in the following manner:

Plant and machinery	$1,000.00	
Less reserve and depreciation	300.00	$700.00

There is a decided advantage in this plan of entering depreciation, because it shows at any time the assets on the books at their original cost. In case of loss by fire, it is hard to convince the adjuster that an asset is worth more than is shown in the account.

A separate reserve account should be opened for each class of property, and a general reserve account not made to include them all. It should be borne in mind that reserves are not surplus profits, but merely deductions from and negatives to the corresponding asset accounts and cannot be paid out in dividends.

MACHINERY ACCOUNT

To cash	$1,000.00		

FIG. 2

The manner of handling the reserve-for-depreciation account is illustrated by means of Figs. 2 and 3. The property account remains at its original value, as shown in Fig. 2.

When the reserves for depreciation on a 10-per-cent. basis have been made for 4 years, the reserve account would appear as shown in Fig. 3.

If new machines are added to the machinery account, a corresponding increase must be made to the reserve. If the

machine under discussion is worn out at the end of 10 years, at which time the reserve is adequate to take care of it, an entry like that shown in Fig. 4 would be required.

The old machine may be sold as scrap for a nominal sum, which should be credited to profit and loss. If the machine becomes worthless or obsolete before the time estimated, the

RESERVE FOR DEPRECIATION, MACHINERY, AND EQUIPMENT

	1.	By profit and loss	$100.00
	2.	By profit and loss	100.00
	3.	By profit and loss	100.00
	4.	By profit and loss	100.00

FIG. 3

reserve will, of course, be insufficient to offset the entire cost. In such a case, the excess must be charged to profit and loss.

New purchases of machinery should be charged to the machinery account, as heretofore, and the process of reducing

Reserve for depreciation (machinery and equipment)	$1,000.00	
To machinery account		$1,000.00

FIG. 4

by means of reserves should be begun at the end of the first or the second year. The new property, however, has nothing to do with the original plant or with the depreciation thereof.

Depreciation	$100.00	
To reserve for depreciation (machinery and equipment)		$100.00
For 10 per cent. allowed for depreciation on the original value of machinery, per inventory sheets.		

FIG. 5

The entry required at the end of each year for the depreciation decided on is as shown in Fig. 5.

If a monthly estimate of depreciation is required, it may be shown on sheets used for that purpose, or it may be placed on the books as indicated in Fig. 6.

Depreciation	$8.33	
To reserve for depreciation		$8.33

FIG. 6

11. Estimating Depreciation.—It is not possible to establish rules for determining the exact rate or ratio at which

depreciation of properties will occur. It varies with different kinds of assets and with the care given to the articles. The effect in each business and its determination is largely a matter of experience and good judgment. Judging from past experience, however, it is possible to determine with reasonable certainty the life of a given property. If it is likely to last for 20 years, then a fair rate would be 5 per cent. on the original cost or perhaps 10 per cent. on the diminishing value. It is apparent in any case that the rate in diminishing values must be higher than the fixed rate on the original unchanging value. Tables of depreciation rates and values for different kinds of properties have been prepared and carefully compiled by engineers and accountants, and these might be of service to persons having to deal with such matters.

12. Land in large centers rarely depreciates, though buildings and improvements always depreciate. The tendency of land is to increase in value, especially in large cities, and in some cases the increment in the land value is allowed to offset the depreciation of the buildings. This does not seem wise, as the buildings will inevitably have to be renewed and renewal cannot be made simply by applying a book increase of real estate. The cash is required for that purpose. On the other hand, the increase in land value is not a business profit, and it should, if taken into account at all, be treated as an increase of the surplus or capital of the concern. If the increase were taken as a business profit, the fiscal period would contain an inflation of profits beyond that legitimately earned from business operations, and this would greatly interfere with the value of comparative statistics of profits from year to year. The depreciation of properties on the other hand is a direct and

Land account	$10,000.00	
To surplus		$10,000.00
For permanent increase .n value of land per recent appraisement, by order of the directors.		

Fig. 7

proper charge to the production expense of the period in which it occurs. A permanent increase in value of land if taken at

all should be entered either to surplus or to a permanent reserve account. The entry may be as shown in Fig. 7.

For any estimated decrease in value as shown by appraisement, the entry shown in Fig. 8 is necessary, in case the property itself is not written down in the account.

Profit and loss	$500.00	
To reserve for depreciation on buildings		$500.00
To cover deterioration of properties during the fiscal period		

FIG. 8

13. Machinery is supposed to depreciate from 10 to 20 per cent. a year, but inventions and improvements will often render replacement necessary long before the estimated time has been reached. If the new acquisition is capitalized, the remainder of the discarded plant must be charged off at once, either to profit and loss or to the depreciation reserve account—to the latter if it is adequate.

In determining the rate of depreciation, the ultimate value of the asset may be first deducted from the original cost, as there is usually a scrap value to an otherwise useless property. This need not be offset, as the depreciation should cover only that which is lost and not the residual sale value, which is saved and transferred into another asset.

Some authorities contend that depreciation should be charged not only with the loss that it replaces, but also with the interest on the cost of the asset during its life. If this is done, the total interest is evenly divided during the years of the depreciation charge and is credited in yearly increasing amounts to the interest account. The result is a burden to revenue, thereby reducing profits more heavily on the earlier years; but there seems to be no justification for burdening capital locked up in this transaction with interest, any more than other capital used in various ways in the conduct of the business.

Depreciation charges are designed to cover the shrinkage in fixed assets only; depreciation of salable assets, stock in trade, and merchandise is often much more rapid, but it is usually taken care of in the reduction of profits over and above the gross cost. Sometimes these fluctuations are shown separately

in the profit-and-loss statement, especially in the case of reductions. Many assets, as loose tools or merchandise, are preferably revalued yearly.

FIXED- OR PLANT-ASSET RECORD

14. In all large businesses, particularly manufacturing businesses, a considerable amount is invested in machinery and equipment, subject to loss in value from its use in the business. It is not always possible to value accurately the loss caused by wear and tear in use, until a particular unit has reached the stage at which it must be withdrawn from service, because it no longer performs efficiently the purpose for which it was installed.

It is an assured fact that all wasting assets must sooner or later lose their original value as productive units, and assume the form of a residual, or scrap, value only.

The deterioration which must take place during the period between the purchase and the installation of the unit, and its ultimate retirement from service, is the loss which should be charged as an operating cost for depreciation.

15. The prominent factors to be considered in arriving at rates for depreciation are:

1. Duration of useful life, based upon a given number of hours of service per day, month, or year. In this connection, it is obvious that a unit working regularly 10 hours per day would reach the ultimate condition for retirement from service sooner than a unit working regularly 8 hours per day, if all other considerations were the same. The period of actual use is, therefore, a factor.

2. The effect, upon the active life of the unit, of expenditures for maintenance, repairs, and renewals.

An approximate determination of the factors—as they actually occur in a particular business—is rarely possible, because the property accounts are not kept with a sufficient degree of analysis, nor are expenditures for maintenance, repairs, and renewals accounted for in a manner that permits their effect upon particular units to be shown. For the purpose of illus-

trating, a list of some of the mechanical units required in a machine shop is given in Fig. 9.

16. It will, of course, be understood that the importance of the illustration would be magnified considerably, if all mechanical units required in a fully equipped machine shop were listed. The partial list shows a different cost for each

DETAILS REQUIRED FOR ESTABLISHING BOOK VALUE

	Invoice Cost	Delivery Charges	Cost of Installation	Total Cost	Depreciation rate Per Cent. Per Annum
Steam engine	$18,500.00	$500.00	$1,000.00	$20,000.00	5
Steam piping	2,300.00	75.00	125.00	2,500.00	6
Steam boiler	7,625.00	125.00	250.00	8,000.00	5
Steam hammer	3,325.00	75.00	100.00	3,500.00	10
Forging machine	2,425.00	25.00	50.00	2,500.00	6½
Punch press	2,910.00	30.00	60.00	3,000.00	6½
No. 1 lathe	5,750.00	100.00	150.00	6,000.00	6½
No. 2 lathe	6,215.00	110.00	175.00	6,500.00	6½
No. 3 lathe	6,775.00	125.00	200.00	7,100.00	6½
Shafting, pulleys, and hangers	2,500.00	75.00	125.00	2,700.00	5
	$58,325.00	$1,240.00	$2,235.00	$61,800.00	

FIG. 9

unit, and several variations in the rates necessary to provide for estimated depreciation.

It is common bookkeeping practice to charge the total cost, shown in Fig. 9 as $61,800, to the account of Machinery and Equipment, and to use one account, Reserve for Depreciation of Machinery and Equipment, in which to credit the depreciation provided for.

This method of accounting is very defective, particularly with respect to the following points:

(*a*) The account Machinery and Equipment does not show the units of which it is composed. Even though details respecting each unit were written in the account, the changes that inevitably take place over a more or less protracted period would

obscure the cost and book value of a particular unit at a given time.

(*b*) If allowances for depreciation are similarly bulked upon the books, an analysis of the property account, and of the depreciation account, would be required, before any particular unit could be retired from the accounts at its book value, as at that time existing.

17. Only two methods are used by which book values may be adequately kept, the object of either one being to present a complete analysis, with respect to each unit, of the changes that have taken place between the original cost, and the book value. These are:

1. A separate ledger account must be provided for the original cost of each unit.

2. A ledger account which embraces sundry units must be used as a controlling account for details to be provided by an auxiliary record.

The second expedient is to be preferred, the requisite auxiliary record being known as a Fixed or Plant-Asset Record. Fig. 10 is a descriptive form:

18. Particular attention is directed to the following important points in connection with Fig. 10:

1. The asset is to be described. This must be done with sufficient particularity to ensure complete identification.

2. Its location in the business is to be stated. This detail is necessary because, in a course of years, assets may be transferred from one location to another.

3. The name of the concern from which it is purchased, and the date of the purchase are to be given. These details enable reference to the purchase invoice, contract, or other conditions affecting the transaction.

4. An estimate is to be made of the useful life of the asset. In the case of a machine, it will probably be based upon a number of years covering a given number of operating hours per year. For instance, if the estimated useful life of a machine is 15 years, operating 10 hours per day during a year of 300 working days, the operating life of the machine—expressed in

Fixed- or Plant-Asset Record

Description of assets..
Location of asset.............................. Ledger a/c...........
Purchased from .... Date purchased.......
Guarantee ....

Estimated life	Depreciation	Depreciation
Hours of operation........	Rate.........% per annum	Amount $...... per......

Original Cost			Record of Depreciation								
			Year	Operating Hours	Amount	Year	Operating Hours	Amount	Year	Operating Hours	Amount
Invoice cost			19—			19—			19—		
Delivery charges			19—			19—			19—		
Cost of installation			19—			19—			19—		
			19—			19—			19—		
Total											

Monthly Record of Actual Repairs (Estimated ...., per ....)

Month	19—	19—	19—	19—	19—	19—	19—	19—	19—	19—	19—	19—
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
Total												

Fig. 10

hours—would be 45,000 hours. An annual rate of depreciation, based upon the foregoing estimate, would obviously be affected if the actual operating hours of the machine were either very much below, or greatly in excess of the estimate. This probable variation from the estimate should be provided for by statistical operating reports. The variation may be of sufficient importance to warrant an adjustment of the depreciation rate.

5. The original cost of the asset is provided for in necessary analytical detail. This is most important, because a machine or other fixed asset, may be moved from one location to another. The book value of the original installation would probably be entirely lost, and a new cost of installation incurred. In such a case, it is absolutely necessary to adjust the asset account as between the cost of installation lost and the cost of the new installation.

6. The annual provision for depreciation is to be shown together with the actual hours of operation during each period. The difference between the original cost and accumulated depreciation will at all times give the book value of the asset.

7. The monthly record of repairs will show the extent to which expenditures have been necessary for the purpose of keeping the asset in good working order. By reason of the fact that repairs and renewals of working parts are not made until the necessity is evidenced, and, in the case of machinery particularly, that the cause is largely attributable to operations of prior periods, it is customary to estimate the cost of repairs and renewals, and to charge the estimated amount periodically (monthly, for instance) whether repairs have actually been required or not. In this case, the amount of the charge is credited to Reserve for Repairs and Renewals, and the actual expenditures are charged against the reserve account. The philosophy of this procedure will be clear if considered in connection with the purchase and installation of a new machine. Deterioration may not be evidenced during the first 2 or 3 years of operation, and so the accumulation of wear and tear may require more than an ordinary expenditure for repairs. If provision for repairs is not made until the expenditures are

actually needed, the burden will inevitably fall upon the period in which the repairs are made, and the contributory periods will escape an expense which they should properly share.

19. Applying the principles which attach to the illustrated form of Fixed- or Plant-Asset Record, to the previously listed (assumed) purchases of machines, the following accounting results are obtained: The annual rates of depreciation upon the assumed purchases are stated as

	Per Cent.
Shafting, pulleys, hangers	5
Lathes, punch press, forging machines	$6\frac{2}{3}$
Steam hammer	10
Steam engine	5
Steam piping	6
Boiler	5

20. These utilities are assumed to be grouped in a single ledger account, Machinery and Equipment. This being the case, the provision for depreciation, even though correctly calculated on the basis of the foregoing variations in rates, would probably be credited to a single account, Reserve for Depreciation (Machinery and Equipment). Therefore, the former account would not show the original cost of a particular unit, nor would the latter account show the depreciation provided for a particular unit. Hence, it would not be possible to ascertain the book value of a particular unit, from the books of account. It is at this precise point that the advantages of the illustrated record are fully apparent as follows:

A record would be made for each one of the units entering into the total cost, $61,800; therefore, the ledger account would control, in total, the aggregate of the details shown upon the record.

In like manner, the reserve for depreciation upon the ledger would control in total the aggregate depreciation shown upon the record.

The book value shown upon the ledger—the original cost, less the reserve for depreciation—would agree with the aggregate of similar details shown upon the record for each unit.

If it became necessary to retire a particular unit from service

before the expiration of its estimated life, or to transfer it to another location, the present book value in the former case, or the book value of the original installation—probably to be lost—in the latter case, would be immediately ascertainable for adjustment.

Estimated and actual expenditures for repairs and renewals would likewise be a subject for control by the general ledger, the details being supplied with respect to each unit upon the record.

In addition, the record would direct attention to units infrequently used, and to inordinately large expenditures for repairs and renewals for any one unit.

21. In providing rates for depreciation, it is of course understood that consideration will be given to the probable residual value, as scrap material, at the end of the estimated serviceable life. Depreciation should account only for value actually lost.

OBSOLESCENCE

22. Probability of Loss.—Loss from depreciation is to be regarded as an absolute certainty. Loss from utilities becoming inadequate by reason of improvements or by reason of changed commercial conditions is not a certainty, nevertheless, it is a contingency that prudent manufacturers recognize.

As a rule, the risk of loss from inadequacy is more pronounced in industries that require the use of numerous and comparatively small mechanical units. In a textile industry, for instance, machines used for spinning, carding, weaving, etc., are more susceptible to inadequacy from improvements than is the case with the heavy machines used in engineering plants. Economy of labor is usually the objective of improvements. In the case of small machines, improvements are apt to take a form that relegates preexisting machines to the scrap pile. In the case of large machines, improvements are apt to affect an attachment only. In all cases, however, the risk of loss from inadequacy, resulting from some change in conditions, is always present, and it is an act of wisdom to make some provision for it.

23. An Arbitrary Reserve.—Since loss from obsolescence is a contingency that may or may not occur, it cannot be definitely measured. A fixed rate, as in the case of depreciation, is not applicable, because time is the unknown factor. Mechanical units may be superseded within a few months of installation, or they may not be superseded during the period of natural life. Provision for the contingency should, therefore, take the form of a special appropriation from profits, or surplus, rather than embodying it in the depreciation rate. If made part of the depreciation rate, it becomes a definite operating cost, whereas, by its very nature, it is absolutely indefinite.

The question naturally arises as to the effect of definitely providing for loss from depreciation, and also providing for the contingency of obsolescence. For instance, suppose the following conditions to be in effect:

Cost of mechanical units, $100,000.
Depreciation, 6 per cent. per annum.
Appropriations for obsolescence, $5,000 per annum.

At the end of the eighth year, the accounts would show:

Reserve for depreciation	$48,000
Appropriation for obsolescence	40,000
Total reserve (against a cost of $100,000)	$88,000

Approximately, one-half of the estimated useful life of the mechanical units has expired, and the reserves, approximately, cover the entire cost.

At the end of the fifteenth year, the accounts would show:

Reserve for depreciation	$90,000
Appropriation for obsolescence	75,000
Total reserve (against a cost of $100,000)	$165,000

24. If the reserve for depreciation accurately measures the useful life of the mechanical units, they are now to be retired from service, and new mechanical units purchased. The reserve for depreciation has accomplished its purpose, and it may, therefore, be either returned to surplus, or divided between the surplus and the appropriation for obsolescence, to any desired extent. A new reserve for depreciation is then

in order, for the purpose of ultimately replacing the new mechanical units, and the appropriations for obsolescence stand as insurance against possible loss from supersession.

ASSET VALUATION

25. Changing Values of Appraised Capital Assets.—The values at which the various operating properties of a manufacturing business are carried upon the books represent a valuation based upon original cost plus expenditures for physical improvements, and deductions for depreciation. Original cost is the only absolutely certain element in the basis. The **cost value** of an asset is the amount paid for it, plus expenditures incident to the purchase, and to any improvements of the asset.

Added value for improvements and deducted value for depreciation frequently represent estimates that vary considerably from actual conditions. Such capital assets as buildings, machinery, and equipment, particularly in the case of a large factory, are often either undervalued or overvalued in the accounts, as the result of improper segregation, and the application of erroneous rates for depreciation. Undervaluations or overvaluations are determinable when the properties are professionally appraised, and an adjustment of the accounts may then be made, to bring them into conformity with the appraisal.

26. Appraisals usually exhibit several bases for the valuations, the basis of sound value being the one commonly accepted as the value which should be shown by the books. The term *sound value* is understood to mean the cost of the asset at the time it was purchased, less the proper deductions for depreciation to the date of the appraisal.

Differences between appraised values and book values are usually occasioned largely by improper provisions for depreciation, their correction requiring a charge against undivided profits, or surplus, when overvalued, or by a credit to a special surplus when undervalued. In this case, an amount at the credit of a special surplus account would represent an appreciation

in the value of the appraised property, but the increased value is not a realized value until the property has served the period of utility assigned to it in the appraisal, or is otherwise disposed of. While the appreciation is held as special surplus, it is clearly distinguished from the earned surplus of the business. It would, of course, bear its proportion of charges for depreciation made against the property account of which it would be a part, and the proportionate charge would constitute realized appreciation.

The appreciation, thus realized, becomes earned surplus; therefore, when charges for depreciation are made, the proportion that is applicable to the appreciation, held as special surplus, may be transferred to earned surplus.

27. Cost Value of Capital Assets.—The most simple form of the cost value of an asset is its purchase price, unaffected by any other considerations. This fact is commonly understood. Thus, the purchase of a single factory building for $5,000 would not present any particular accounting feature other than to enter the purchase as a Building, costing $5,000.

If, instead of purchasing a single factory building, two or more buildings of different construction were purchased for $50,000, the purchase would not be correctly accounted for as, Buildings costing $50,000. Difference in construction would probably affect the depreciation rates.

If the cost values were not properly segregated in the accounts, and a corresponding segregation made of reserves for depreciation, the cost and book values of a particular building or class of buildings would not be shown by the accounts. If the buildings were not separated in the cost of purchase, they should be separately valued, the aggregate of the valuation being an amount equal to the cost of purchase.

28. If land and buildings were purchased, dissimilarity of the assets would require a separate account for the cost value of the land. If the purchase did not state the values separately, a valuation should be made in order that the purchase cost of the land may be separated from the purchase cost of the buildings.

From an accounting point of view, dissimilarity between the two forms of assets—land and buildings—is clearly to be perceived when the fact is taken into consideration that land usually increases in value, merely on account of its usable area, irrespective of its physical condition. On the other hand, the chief element of value attached to a building is its physical condition.

29. Real Estate.—In view of the fact that the meaning of the term *real estate* is not confined to land or to buildings, but comprehends land and buildings (property that is not movable), the term, if used as a caption for a ledger account, would not indicate the subject of the account as being land only or land and buildings. Therefore, the term real estate does not appear to be so appropriate for an account name as the separate terms, land and buildings.

30. Land.—In the case of land, expenditures for survey, security of title, legal transference, and commissions are items that may be added to the cost of purchase. Until such a time as the land is used for revenue-producing purposes, expenditures for taxes would also be considered an item of cost. When revenue-producing purposes are commenced, expenditures incidental to the land are chargeable against operations, unless they permanently increase the value of the land.

31. Buildings.—In the case of buildings, whether purchased or constructed, that are ready for use, subsequent expenditures are to be considered as one of the two following classes:

1. *Repairs,* necessary for continuing the utility of the building, to be charged against operations, not to be added to the cost value of the building.

2. *Improvements,* in the nature of additions or betterments. Expenditures for unquestionable additions should represent additional value, to be added to the cost value of the building. Expenditures for betterments usually require careful consideration, because to some extent they involve the destruction of a previously existing value, which must be considered in determining the value that may fairly be added to the original cost

value. The increase in the value of an asset through betterment should always be a fair valuation of the asset, after betterment expenditures have been made, as compared with its value before the expenditures were made.

32. The cost value of constructing a building should include all necessary expenditures required for the purpose of putting it into a condition ready for use. Interest payable on money borrowed and used in the construction, is an item of cost allowed by Public Utility and Interstate Commerce Commissions.

33. Assets Acquired as Donations.—Assets acquired as donations are usually such as conform to one or the other of the following conditions: (*a*) Ownership may be conditioned upon the carrying out of stipulated conditions during a definite period; (*b*) ownership may be unconditional, but asset value is more or less uncertain.

34. Conditional Assets.—A conditional asset, in the form of land for a factory site, may be donated by a chamber of commerce, upon condition that a factory be erected and a given number of workmen employed for a given number of years. Until the conditions have been complied with, title to the land is not passed; therefore, for accounting purposes, the contingent asset may be held upon the books at a nominal value only, say $1.00, for the purpose of exhibiting the fact that a contingent asset exists.

If the conditions are eventually complied with, and the donation is completed, a conservative valuation of the land may be entered upon the books, and credited to a special surplus account such as Donated Surplus, the essential point being that it would not be surplus earned by the operations of the business, and, therefore, not distributable as such. A transaction of the foregoing character does not affect capital-stock or treasury-stock accounts. It is a case of an additional asset coming to the business free of cost.

35. Unconditional Assets.—Ownership may be unconditional, as when a stockholder or stockholders transfer capital

stock back to a corporation for the purpose of increasing its working funds. Opinions of professional accountants are divided as to the accounting procedure that should be followed in such cases, particularly when the donation is specifically connected with a particular asset of the corporation, as a patent, good-will, or other intangible property for which the corporation issued the capital stock. On the one hand, it is contended that the credit entry for the donated stock should be made to the account that represents the book value of the asset in question, while on the other hand, it is contended that such procedure would discredit the original valuation placed upon the asset. Between the two opinions, it would appear that if the original valuation had a sound basis, its reduction by donated capital stock is undesirable, notwithstanding the fact that the donation is an indirect return of part of its purchase price. The important points are: the credit entry should not be made to the surplus account until the donated treasury stock has been sold, and the credit should then be made to a special surplus account, in order that it may be clearly shown as surplus which was not derived from regular operations of the business. The subject is clearly shown by the following exemplification:

Assume a corporation to have issued capital stock for \$500,000, including \$100,000 for the purchase of a patent. Subsequently, the vendor of the patent donates capital stock, par value \$25,000, back to the corporation. The donated capital stock is unquestionably to be treated as treasury stock, but until sold its value as a surplus-producing factor is not known. The following ledger accounts would satisfactorily cover the transactions:

TREASURY STOCK DONATED

	Dr.	Cr..
Reserve for treasury stock, donated, not reissued	\$25,000.00	

RESERVE FOR TREASURY STOCK

	Dr	Cr.
Treasury stock—Donated....................		\$25,000.00

36. If the whole or any part of the donated capital stock were sold or reissued for any purpose, the amount reissued

would be credited at par to the former account, and debited to the latter, the proceeds (cash or other assets) being credited to Capital Surplus, Donated Surplus, Special Surplus, or under any other caption which distinctly shows that the resulting surplus is not earned surplus of regular business operations. Upon financial statements, any balance at the debit of treasury stock —donated should be deducted from the liability for capital stock.

The philosophy of the foregoing procedure is:

Donated treasury stock is cleared through the reserve account at par value, and is, therefore, unaffected by the value actually received for it, when it is reissued. The surplus is not anticipated, but is accounted for when it has been realized.

RESERVES

SPECIAL RESERVES

37. A reserve implies that which is reserved, or kept back, for future use, set aside for a purpose, such as a land reserve; a reserve of money or funds; the lawful reserve of the United States treasury ($150,000,000); bank reserve, with ordinary banks 15 per cent., and with reserve and central reserve banks 25 per cent., of their deposits; and insurance reserve. All these reserves, however, have reference to assets; the specific reserves now to be taken up refer to reserves from profits.

Reserves are a charge against profits and are generally set aside for definite and specific purposes; as, general reserve; reserve for bad debts; reserve for depreciation; reserve for equalizing dividends; reserve for insurance; reserve for sick benefits, discounts, and expenses; and reserve for bond redemption.

38. General reserve is really another name for surplus, which is explained later, being merely a reserve for unforeseen contingencies.

39. Bad debts are almost certain to occur in every business, and unless a generous surplus is maintained a *reserve for*

bad debts should be carried. It is a good plan to maintain a reserve for uncollectible accounts at a stated figure, as well as to charge against this reserve such accounts as are deemed worthless or uncollectible and to credit the account annually by a charge against profits with such amount as will restore it to the amount stated. If any of the debts so charged off are afterwards collected, they are credited to the reserve account. The amount reserved to provide against bad and doubtful accounts depends on the class of customers, the kind of business, and the business conditions. A given percentage, from 1 to 5 per cent. of the total amount due from customers, is usually maintained as the reserve or provision for possible bad debts. Sometimes 1 or 2 per cent. of the sales is set aside each year. This account may be called a guarantee account, since by its means the collection of accounts receivable is assured in advance. The form of ledger account is as shown in Fig. 11.

Reserve for Bad and Doubtful Debts

1922			1922		
Jan. 1	Losses charged off		Jan. 1	Balance	$ 6,724.90
to	during year	$ 5,987.85	Dec. 31	Profit and loss	
Dec.				for year	5,450.00
31	Balance	6,187.05			
		$12,174.90			$12,174.90
			1923		
			Jan.	Balance	$ 6,187.05

Fig. 11

40. Reserve for depreciation has already been covered under the heading of Depreciation and will therefore be understood without further explanation.

41. It is decidedly advantageous, particularly with companies whose stock is listed on the exchanges and offered for sale to the general public, to maintain a regular rate of dividend. Frequently, if the profits vary from year to year, the surplus over the adopted dividend rate is set aside in prosperous years in a special reserve to enable a continuance of the rate in years in which the profits have shrunk below the requisite sum, which reserve is the *reserve for equalizing div-*

idends. Of course, if an adequate surplus is maintained from year to year, it serves the same purpose as this reserve and has the tendency of strengthening the position of the company.

42. It is the custom with some companies, especially where their fire risks are scattered, to carry their own insurance. This is especially true with companies whose risks will not be taken by the insurance companies without charging an exorbitant premium. The *insurance reserve* is created by a charge against profit and a credit to the insurance reserve for the amount to be set aside, either the amount that would be charged by insurance companies or less; sometimes it is more, especially during the earlier years of its creation. If the company does not sustain any serious losses, the reserve should grow to a very large amount in a reasonable term of years so that new appropriations to it may be suspended. On the other hand, if a fire loss occurs during the early years of its existence, it may be entirely wiped out and an additional loss sustained.

RESERVE FOR INSURANCE

Debit With	*Credit With*
All losses sustained from fire, wind, and water, by a credit to the property account; balance representing the credit excess in the reserve.	The annual appropriations for fire protection, by a charge against profit and loss; interest on investment of insurance funds.

FIG. 12

Fig. 12 shows how entries for insurance reserve should be made. Sometimes all or part of the insurance reserve is represented by an investment in outside securities, for which a separate account is opened, as insurance-fund investment, or investments.

43. Reserve for discounts and expenses, as well as other special reserves, are designed to meet anticipated conditions for which provision is desirable.

44. The **reserve for bond redemption** is often compulsory, as the condition of the obligation is that repayment

shall be out of profits that shall be set aside for that purpose, by a debit to the profit-and-loss account and a credit to the bond-redemption reserve account. This account is generally collateral to a fund account, the reserve account merely reserving the profits from distribution in the form of dividends; and unless a redemption, or sinking, fund is set aside out of the assets the profits so reserved remain offset among the assets, though without any distinguishing earmarks. In many cases, however, it is required by the terms of the loan that a fund be set aside or placed in the hands of a trustee to meet the bond issue or other indebtedness at maturity. Frequently, the annual deposit to the sinking fund must be made to the trustee even without the creation of a reserve out of profits.

45. A distinction should be observed between true reserves, or segregations of surplus, and so-called reserves which are really allowance, or deduction, accounts. An account which serves merely to offset an asset account, is an *allowance account* and not a true reserve. The most frequent example of such an allowance account is, perhaps, the *reserve for depreciation.* It is set up to record the diminishing value of some particular asset, the entry usually being made as given in Fig. 13:

Depreciation (an expense)
  Reserve for depreciation

Fig. 13

An allowance account differs from a true reserve account in that it is not represented by equal value in some form among the assets. Perhaps the distinction can best be made clear by an illustration: Assume that machinery is purchased at a cost of $10,000, on which the ordinary depreciation is

Depreciation	$1,000	
Reserve for depreciation		$1,000

Fig. 14

10 per cent. annually. At the end of each year, an entry is made charging the cost of operations and reducing the value of the assets $1,000, as shown in Fig. 14.

46. The credit to reserve for depreciation is merely an allowance, or deduction, from the asset account, Machinery, the difference between the credits in the reserve account and the total debits in the asset account, representing the present value of the asset.

Now, assume that the concern wishes to make a further reservation of profits to take care of the possible obsolescence of its machinery. Accordingly, a certain portion of the general surplus is set aside for the purpose, say, a reservation of $2,000. The entry creating this reserve is made as in Fig. 15.

Surplus	$2,000	
Reserve for depreciation of machinery		$2,000

To take care of contingent obsolescence of machinery.

Fig. 15

This latter reserve is a true reserve because it represents a portion of surplus set aside for a specific purpose.

A **reserve fund** is a special segregation of cash, or security values, represented by a true reserve on the opposite side of the balance sheet, and which has been created for a specific purpose.

SECRET RESERVES

47. A **secret reserve** is a hidden surplus established by the excessive writing down of assets or by a manipulation of inventories, causing their undervaluation, or by ignoring legitimate increase in their value. It is sometimes used as a cover, or offset, to bad investments or losses to which it is not desired to call attention. This practice is severely censured as an injustice to ordinary stockholders, involving an inaccurate revenue account and balance sheet.

It is claimed that in some cases bank officials have written down the value of the bank premises or have established secret reserves in the form of insurance reserves, as against losses from bad loans or embezzlements. This, however, need not be so severely condemned, because to provide insurance against possible future bad loans or embezzlements seems to be as justifiable as any other form of business insurance. If

used, however, to conceal past instances of this kind, it would not be proper. The question is interesting and one in which it is hard to draw an exact line, as the undervaluation of assets is regarded by some as an evidence of commendable conservatism, while it is hotly condemned by others as a trick to escape taxation. This latter objection would be overcome in most cases by carrying the assets at their full valuation and creating a reserve to offset them.

48. Secret reserves are established by: (1) omitting intentionally or inadvertently assets that should be included; (2) undervaluing assets, intentionally or otherwise; (3) writing off too much depreciation; (4) charging addition and improvements to repairs or maintenance account instead of to the plant account; (5) creating reserves for bad debts in excess of the amount required; (6) charging production costs to general expense instead of to the manufactured article; (7) including fictitious liabilities in the accounts or overstating liabilities; (8) making additions or improvements and charging the cost to surplus account; (9) neglecting increases in value of property because of surroundings and improved conditions of locality; and (10) understating values in good years and increasing them in lean years, as a means of keeping the dividends uniform from year to year.

The hidden reserve is undoubtedly a commendable creation, in case it is not carried to excess, and provided it is not detrimental to interested persons. The spirit of conservatism is to be commended by the accountant rather than criticized; yet if the stockholders are kept in ignorance of a secret reserve, the accountant should draw attention to the fact in his report, provided it is of sufficient proportions to merit special attention.

SURPLUS

49. Surplus is that which remains over; that is, the overplus, the residue. It consists of the excess of assets over liabilities and capital investment, and is represented as a credit to the surplus or the undivided-profits account. It is designed to meet unforeseen contingencies or to strengthen the

financial condition of the company. It may be originally subscribed in addition to capital at the time a company is organized, as shown in Fig. 16. Such a surplus is called a *con-*

Subscription	$200,000.00	
To capital stock		$100,000.00
To surplus		100,000.00

FIG. 16

tributed, or *capital,* surplus and should not be used for the purpose of paying dividends as to do so would virtually be a return of capital to the stockholders. It may be accumulated out of

Profit and loss	$5,000.00	
To surplus		$5,000.00

FIG. 17

profits with an annual credit, as shown in Fig. 17. Such a surplus is known as *earned surplus.* It may also consist partly of a direct acquisition of value not belonging to the fiscal

Real estate	$2,000.00	
To surplus		$2,000.00
Increment of value as per appraisement.		

FIG. 18

period or to the earnings of the business, and therefore not credited to profit-and-loss account, as shown in Fig. 18.

50. Advantages of Surplus.—The advantages of surplus are as follows:

1. If surplus is unrestricted, it may be used for the payment of dividends.
2. It may be held as reserve for contingencies.
3. It may, by the provision of additional working capital, be considered as additional capitalization. A progressive concern is likely to be in need of an enlarging capital, and the wisest and most conservative way of providing for such needs is by the gradual accumulation of surplus, which provides for the necessary increase of working capital and keeps the control of future profits in the hands of the stockholders.
4. It enables the equalization of dividends by providing for the payment of dividends out of surplus in unprofitable business periods.

A fictitious surplus must not be used for distribution in the form of dividends. As an illustration, take a mining company formed with land $999,000, cash $1,000; and capital $1,000,000. The principal stockholders may donate $500,000 in stock to the treasury, and these shares of stock may be sold at a reduction to provide working capital and be credited to such an account. If the entry should be credited to surplus instead of to working capital, this is evidently not a bona-fide surplus, as it is quite likely that the land was not intrinsically worth the $999,000 in the first place, and the payment of dividends out of such a surplus would not be out of earnings, but out of capital.

51. Methods of Handling Surplus on the Books.—In handling the profits and surplus of a business, the dividend

Profit and loss	$37,000.00	
To dividend No. 12		$25,000.00
To surplus		12,000.00

FIG. 19

may be paid out and charged to the profit-and-loss account and the balance transferred to the surplus, as shown in Fig. 19, or, the entire profits of the period may be transferred to surplus account, as shown in Fig. 20, and the dividend charged to surplus, as shown in Fig. 21.

The question of the better way is merely one of fact. If the dividend is ordered paid out of the profits of the year, it

Profit and loss	$37,000.00	
To surplus		$37,000.00

FIG. 20

should be charged as shown in Fig. 19, and if, on the other hand, it is ordered paid out of the surplus or undivided profits on hand, the entries should be as shown in Figs. 20 and 21.

A reference to the resolution of the board of directors will determine the point.

Surplus	$25,000.00	
To dividend No. 12		$25,000.00

FIG. 21

Considerable losses or gains not concerned with the transactions of a fiscal period, and yet occurring therein, should be

charged, or credited, to surplus account; in this way they will not affect the average profits of comparable periods.

If a large surplus is maintained, it may not be necessary to carry small reserve accounts for bad debts and other contingencies.

52. Investment of Surplus.—Sometimes all or part of the surplus profits of the company is invested in outside securities, such as bonds and stocks of other companies. When this is done the company is in no danger of being without funds in case of a crisis, but it is evident when the low interest rate is considered, that the money thus invested could be used more profitably in the business. A surplus is always represented by an equivalent of assets and of course these assets are not ear-marked or designated. They are simply retained among the assets as part of the working capital of the company, but when it is decided to invest in gilt-edged securities, it is obvious that cash must be withdrawn from the business. In

Securities (or surplus fund)	$10,000.00	
To cash		$10,000.00
For investment of surplus fund in gilt-edged securities, per order of the directors.		

Fig. 22

such a case, it serves as a surplus fund, and the amount expended may be debited to surplus fund or to securities or to some other appropriate account. It should be noted, however, that a surplus account would stand on the books as a credit, while the surplus fund is an asset and, therefore, a debit account.

Assuming that an investment of $10,000 is made out of surplus, the entry shown in Fig. 22 would result.

The income from the surplus fund invested will, of course, be debited to the cash account and credited to the income account. In case a business depression arises and the company is in need of funds, it is an easy matter to turn the securities into cash. It is well to remember, however, in order to prevent confusion, that a distinction is made between surplus fund and surplus account. The surplus account is sometimes called *reserve fund,* and other terms are occasionally used for it, as *margin, rest, contingent fund,* etc.

CASH RECORDING

METHODS OF HANDLING CASH

53. The term *cash* as here used is intended to mean money on deposit in a bank, as well as checks and money actually on hand. Of all the various kinds of assets in business, cash is the most important, because of its very nature. It is what passes most readily from one person to another as the equivalent in value of all other kinds of property. For this reason, more care and attention should be given to a full accounting of cash than to other transactions in a business.

54. It is the intention here to make clear the principles of proper accounting for cash and to illustrate these principles by examples that are more or less common to the average business. It should be understood, however, that the application of these principles may be varied according to the requirements of a particular business; for instance, the requirements of a bank with respect to cash make its cash records more complex than the average cash account.

Before discussing the various forms of cash account and their uses, it is necessary to determine the best methods of handling cash; that is, what should be done with cash received, and how payments should be made.

55. Paying by Check.—The best method of handling cash is to deposit in a bank as soon as possible the identical money received, whether checks or currency, and to make all payments by check. This method is found to be best, because it simplifies the work of keeping the cash account accurately, as is explained later. There are other reasons why it is to be preferred to other methods, but they concern the work of an auditor rather than that of the accountant, and are not discussed here.

56. Fund for Small Expenditures.—It is frequently necessary to provide a fund for making numerous small expenditures, that are common to nearly all lines of business, and which cannot be made by check. Such a fund is known as *petty cash,* or imprest fund, to distinguish it from the main cash. Its uses and relation to the main cash are explained more fully later.

57. Common Method of Handling Cash.—In a common method of handling cash, only checks received are deposited in the bank; any currency received is, for the time being, kept in the cash drawer, and used with other currency, to make payments out of the drawer. If such receipts in currency are not sufficient to maintain a balance in the drawer, then a check is drawn on the bank account and cashed at the bank. On the other hand, if the balance in the cash drawer becomes too large, then a round sum is taken out and deposited in the bank. This method is not provided for in this outline because it is thought best to discourage its practice. Though it is less desirable than the method mentioned in Art. **55,** it is persisted in very commonly by business men and bookkeepers, chiefly because it is the survival of an old custom, and any suggestion of a change is looked upon as an introduction of unnecessary red tape.

CASH ACCOUNTS

58. Bank Account.—The record of money on deposit in bank is a vital part of the cash account. The usual method is to keep a separate record of bank transactions. Deposits when made are entered in the deposit, or pass, book. Checks are usually printed in book form with a margin on the stub for records. On this stub is entered the balance forwarded; to it is added the deposits made, as entered in the deposit or pass books, and from the total is deducted the aggregate of the checks issued from the opposite page, leaving a balance to be forwarded. An example of such entries is shown in Fig. 23.

59. Bank Settlement.—It should be a rule in every business to have the bank account settled by the bank at least

once a month. When the deposit, or pass, book is left for settlement, the bank enters the total of the deposits made, plus the balance at a previous settlement, and from the total,

Forward		$2,101.98
1913, March 31, Deposit:		
Hare, Green & Company	$197.02	
Brown & Jones	10.76	
Blank Manufacturing Company	210.34	
		418.12
		2,520.10
Checks, No. 891–No. 895 (issued from opposite page)		260.19
Forward (balance per cash book)		$2,259.91

Fig. 23

deducts the checks that have been paid out of the account, the paid checks being returned with the deposit, or pass, book, the difference being shown as the balance then on deposit. This balance shown by the deposit book does not always agree with that shown on the check-stub, because some checks that have been issued may not have been presented to the bank for payment when settlement was made. A reconciliation of the two balances should be entered on the check-stub in a form similar to that shown in Fig. 24.

Balance, per check-stub		$2,259.91
Checks Outstanding:		
No. 888,	$190.45	
No. 893,	56.19	
No. 894,	75.00	321.64
Balance, per bank		$2,581.55

Fig. 24

60. Several Bank Accounts.—If money is kept on deposit in more than one bank, the method is the same as that just explained, except that a separate account is kept on the check-stub of each bank, and each bank account is settled independently of the others, although at the same time.

61. Relation of Bank Account to Cash.—When the records of cash in bank are kept according to the methods just outlined, it is only necessary to copy the details from the check-stub into the cash book, assuming, of course, that all money

received has been deposited in the bank. In the cash book are also made entries (which do not appear on the check-stub) to show the amount of discount allowed on sales or taken on purchases. At the end of each month the entries in the cash book are proved to be correct by the agreement of the cash-book balance with the balance in the bank, as shown by the check-stub. The name of the bank, or banks, should be written after the balance, at the end of each month, to indicate clearly the nature and location of the balance.

62. Cash-Book Form.—Fig. 25 illustrates a cash book kept according to the methods just outlined; that is, all the cash received was deposited in bank and so entered in the deposit book and on the check-stub; all the payments were made by check, as appeared from the entries on the check-stub; and the balance on hand agrees with the bank deposit book after settlement and after adjusting the balance for outstanding checks, as illustrated in Fig. 24, from the check-stub memorandum.

If more than one bank account had been kept, the cash balance would have been shown as made up of balances in the several banks, each of which would agree with the respective check-stubs, and deposit books after proper adjustments for outstanding checks.

A blank column has been inserted on the side for cash receipts. This may be found convenient in some cases for a class of receipts that occur frequently, such as cash sales, and that may be posted in monthly totals instead of daily.

No provision has been made on the side for payments to show the distribution of charges to various operating and expense accounts. Some cash books are made unnecessarily burdensome by the use of numerous columns for making direct charges to operating and expense account, but the practice is not a good one. Such distribution is provided for in the system outlined for recording purchases and expenses in the voucher record, or purchases and expenses book.

63. Use of Checks Without Stubs.—There is another method of using checks that results in a great saving of time

over the method of check-stub entries. The checks, instead of being in book form, are done up into pads without any stub. Whenever a check is issued, it is entered immediately in the cash book, and no further entry from stub to cash book is necessary. Similarly, cash received is entered in the cash book at the same time it is deposited, and the details thereof are indicated. In other words, all the entries that, by the former method, were entered on the check-stub, are, by this latter method, entered once and for all in the cash book. The reconciliation of the bank balance is shown in the cash book itself, instead of on a check-stub.

64. Cash Book With Bank Columns.—Fig. 26 illustrates a cash book kept according to the method of using checks in pads and without the use of check-stub entries. It is to be noticed that this is the same as the cash book shown in Fig. 25, except that two columns have been added for the bank accounts. The form admits of the addition of as many more columns as there may be more accounts kept with banks.

The agreement of the cash-book balance with the bank accounts (and the latter with the bank settlements) is readily seen from the *balance* entries which show details that would have to be entered on the check-stub in connection with the use of the cash book shown in Fig. 25. If it is found necessary to prove the cash-book balance before the end of a month, the footings of the various columns can be entered in pencil, and a temporary memorandum of the agreement made on loose paper.

It may sometimes happen that cash would be received on the last day of the month that could not be deposited until the next day. In such a case, the balance on hand would be shown as made up of so much for cash and checks, as well as balances in bank.

65. Cash Entries.—In making cash-book entries, the following general rules should be observed:

Show balances on hand in red ink, at the first and at the end of each month, so that they may be readily distinguished as balances.

1923 RECEIPTS

Date		Account	Explanation	Ledger Page	Discounts and Sales	
1923						
March	1	Balance				
	3	D. J. Hess	Invs. 1/10-1/29	√	1	80
		Smith & Gray	Invs. 2/8	√		49
		Good Mfg. Company	Invs. 1/2-1/30-3/1	√	3	04
	8	Bills payable	First National Bank, due 6/7, for loan at 6 per cent.	102		
	12	A. H. Mason & Company	Invs. 1/9-2/13	√		89
		E. F. Corson	Invs. 1/10-1/29-1/31-2/14	√	5	83
	19	Bills receivable	B. K. Mills	12		
		Interest	B. K. Mills	150		
		D. J. Polk & Company	Invs. 2/8-2/11	√	1	59
	25	Taylor & Lamb	Invs. 10/9/12	√		
	29	Interest	On deposits with First National Bank	150		
	31	Hare, Green & Company	Invs. 2/2/8-3/19	√	4	02
		Brown & Jones	Invs. 3/1	√		22
		Blank Mfg. Company	Invs. 11/9-11/20-12/18	√		
					17	88
	31	Accounts receivable	Total for the month as above	25		
	31	Discounts on purchases	Total for the month, as opposite	162		

NOTE.—Accounts-receivable and accounts-payable columns show the aggregate amounts to be posted
Some cash books have a net cash column on each side showing net amounts paid to and by persons. The discoun

Date		Account	Explanation	Discounts on Sales	Accounts Receivable	Led… Pa…
1923						
March	1	Balance				
	3	D. J. Hess	Invs. 1/10-1/29	1 80	90 00	
		Smith & Gray	Invs. 2/8	49	48 90	
		Good Mfg. Company	Invs. 1/2-1/30-3/1	3 04	150 18	
	8	Bills payable	First National Bank, due 6/7, for loan at 6 pct.			1
	12	A. H. Mason & Company	Invs. 1/9-2/13	89	89 26	
		E. F. Corson	Invs. 1/10-1/29-1/31-2/14	5 83	291 45	
	19	Bills receivable	B. K. Mills			
		Interest	B. K. Mills			1
		D. J. Polk & Company	Invs. 2/8-2/11	1 59	79 40	
	25	Taylor & Lamb	Invs. 10/9/12		140 19	
	29	Interest	On deposits with First National Bank			1
	31	Hare, Green & Company	Invs. 2/8-3/19	4 02	201 04	
		Brown & Jones	Invs. 3/1	22	10 98	
		Blank Mfg. Company	Invs. 11/19-11/20-12/18		210 34	
				17 88	1,311 74	
	31	Accounts receivable	Total for the month, as above			2
	31	Discounts on purchases	Total for the month, as opposite			1
	31	Cash, Safe National Bank	Transfer of funds			

Town Trust Company
390 20
352 81
379 87
87 20
,210 08
334 89
544 97

Always enter details that must be used to explain, but do not use unnecessary words or repetitions. For instance, it is well to indicate dates of invoices for which money is received, or date of note, when due, etc., covering a loan from a bank or a note received from a customer. On the other hand, it is a waste of time to use and repeat the words *To* and *By* or to insert the words *Amount received from* or *Amount paid to* when the general nature of the entries is already indicated by the headings of each side of the cash book.

Enter the year at the head of the date column on each page, and the month and the day underneath.

After the date of each entry, enter the name of the ledger account affected first and then follow with the details. The name of the party in whose favor checks are drawn should always appear in the cash book, so that checks may be readily identified with the cash entries.

In case discounts are allowed in settlement, show the gross amount of the invoices settled for in one column and the discount in another, so that both discount and cash received can be posted in one account from the cash book to the ledger. Some prefer to make separate entries for cash and discounts. At the end of the month, the total discounts allowed are entered on the payment side, and total discounts taken are entered on the receipt side.

Make entries as soon as possible after transactions have actually occurred in the place where it is intended that the original entry should remain permanent. Some make rough memoranda in a book called a *blotter,* or *scratcher,* and afterwards transcribe to the cash book, but such practice is a waste of time and a source of confusion and error.

66. Cash Postings.—In posting, it should be remembered that the cash account itself is a ledger account, although, for convenience, it is not kept in the ledger. Being at the same time a book of original entry, only one posting for each set of debits and credits is necessary, and that is the opposite of the entries in the cash book. In other words, every debit in the cash book (receipt) should be posted to the credit of some

account in the ledger, and every credit in the cash book (payment) should be posted to the debit of some account in the ledger.

The total of the accounts-receivable column is posted at the end of the month to the ledger account of the same name. The details are posted to the credit of each customer's account in a separate ledger. Similarly, the total of the accounts-payable column is posted to a ledger account and the details are entered in a purchases and expenses book or a voucher record. These ledger accounts are known as *controlling accounts,* because they include in total all the entries that affect any of the customers' accounts, or accounts of those from whom purchases are made. The relation of these controlling accounts to the detailed accounts, and the methods of keeping them in agreement have already been explained.

67. Petty Cash.—Two methods of providing for small payments in currency are recognized as good practice; these are as follows:

First Method.—At the outset, there is drawn from the bank a round sum that will be large enough to last a month and that is charged in the ledger to a petty-cash account. A record of payments out of this fund is kept on printed statements, as shown in Fig. 27, and at the end of each month, a check is drawn on the bank covering the total of all payments during the month. This check is charged out of the cash account, like any other check. When the check is cashed, the fund is restored to the amount originally drawn, and shown as a balance in the petty-cash account in the ledger. The distribution of the charges covering petty-cash payments is made through the purchases and expenses book or voucher record. The petty-cash balance should be verified frequently. The currency on hand and the vouchers or other memoranda of payments for the current month should agree with the round sum shown by the ledger account.

Second Method.—Another method of providing for payments in currency is to draw funds from bank by check whenever the balance of currency on hand becomes low. Such checks are

PETTY CASH BOOK

Date		Explanation	Received	Paid	Office Expenses	Postage	Freight and Express	Traveling	Miscellaneous Account	Amount
1923										
March	1	From Cashier	$100 00							
	1	L. R. Warren, Postmaster		$10 00		$10 00				
		N. C. R. R.		6 88			$ 6 88			
		R. M. Wallace		3 65				$3 65		
		Car fares		60				60		
	3	Model Towel Supply Company		1 25	$1 25					
		D. R. Toomey, haulage labor		2 75					Factory expenses	$ 2 75
	7	American Express Company		3 25			3 25			
		Brilliant Electric Light Company		1 50	1 50					
	8	Postage due		06		06				
		Car fares		45				45		
	10	N. C. R. R. Co.		6 77			4 25		Factory expenses	2 52
	12	Cold Spring Water Company		3 00	3 00					
	15	L. R. Warren, Postmaster		10 00		10 00				
	19	N. C. R. R. Co.		13 10	25		12 85			
		Car fares		75				75		
	20	Employes Aid Society		5 00					General expenses	5 00
	25	N. C. R. R. Co.		4 69			4 69			
		Adams & Watson		60	60					
	29	American Express Company		4 35			4 35			
		Car fares		55				55		
	31	L. R. Warren, Postmaster		8 00		8 00				
		Total (deduct)	$ 87 20	$87 20	$6 60	$28 06	$36 27	$6 00		$10 27
	31	Balance	12 80							
	31	From cashier	87 20							

FIG. 27

entered in the cash book, like any other check, and are charged in the ledger to the petty-cash account. At the end of each month, credit is given through the journal for all payments made during the month, various accounts being charged with the distribution shown on the petty cash, as is illustrated in Fig. 27. This method is not illustrated fully, but the form shown in Fig. 27, bound in book form, may be used for the purpose, by entering as received the amounts drawn from the bank at various times. The balance shown by the petty-cash book should then agree with the balance in the petty-cash account in the ledger, and should be verified frequently by seeing that the currency on hand is the same as the petty-cash balance.

No matter which of the two methods just mentioned is used, it should be a practice not to carry as cash from time to time any memoranda of payments, which are not entered as payments, on the ground that they are temporary and will be made good later. A possible exception to this rule is the case of wages paid to discharged employes. It is often necessary to advance such wages out of petty cash, and retain a memoranda thereof, until the regular pay roll is made up. All wages are included in the pay roll, and cash drawn from the total, out of which the advances from petty cash, such as small loans until pay day, advances for fares for short trips by employes, etc., are made good.

68. Cash Control.—The foregoing outline has to do principally with the proper methods of handling and recording cash received and paid out. No system for cash, however, is complete unless it comprehends some means of insuring that all cash earned or due has been actually received (as well as recorded) and that none of the cash payments are not a proper charge against the business. In all systems of cash control, there are three principles that are more or less commonly applied. These are as follows:

1. The custody of cash and the records of actual receipt and payment are assigned to one person or one department, to be directly responsible to the proprietors.

2. To another person, or department, is assigned the duty of actually executing transfers of property other than cash, for which payments in cash is anticipated, and making a complete record of such transfers.

3. An impartial and competent review of the results of each of the preceding duties to insure proper harmony between them.

69. Examples from actual business practice, illustrating these principles, are as follows:

In a department store, by the use of duplicate sales slips, a record of every sale is sent with cash to the cashier and a record accompanies goods to be wrapped and is retained there; also, the work of both departments is established as correct by the routine work of the auditing or accounting department.

In some department stores, the work of all three departments is combined in the work of the salesperson, by the use of a mechanical cash register. The cash registrations in total are, in turn, only accessible to the auditing or accounting department.

Similar principles are applied in the use of fare registers on street cars. The conductors' returns are made directly to the treasurer, the register readings are taken regularly and reported to the auditor, and the auditor establishes their agreement with the treasurer's returns to him.

THEORY OF ACCOUNTS
(PART 5)

THE BALANCE SHEET AND ITS CONSTRUCTION

DEFINITIONS OF TERMS

1. As has already been stated, there are three divisions, or classes, of accounts—the capital accounts; the real, or balance-sheet, accounts; and the nominal, or profit-and-loss, accounts. The various accounts affecting profit and loss and the manner of preparing statements from them and the class comprising the assets and liabilities will now be taken up. These latter are usually set forth in the annual balance sheet or statement of condition, which is made up at the end of each fiscal period to exhibit a concern's present net worth or financial standing. This statement is made up after the net profit has been determined, and usually after the ledger has been closed. It is often found advantageous, however, to complete the adjustments and statements on paper before closing the accounts. In this way changes can be made, if necessary, without having to alter the ledger accounts. The net profit becomes the keystone of the balance sheet and is necessary to prove the accuracy of both statements. Before proceeding to the preparation of statements, however, the various kinds of assets and liabilities will be taken up in order and defined.

2. The **assets** or **resources** of a business comprise anything of value belonging to it, such as real estate, machinery, furniture, merchandise, prepaid charges; it also comprises

obligations of any kind owing to it, as notes and accounts receivable, mortgages receivable, etc. These are divided into *fixed* and *current*, or *floating*, *assets*.

3. The **liabilities** of a business comprise all obligations owing by it to others, as notes and accounts payable, mortgages, bonds, accrued charges, etc. These are divided into *fixed*, *current*, or *floating*, and *contingent liabilities*.

4. The capital account is credited with and indicates the amount of capital invested. It is not necessarily a liability, but simply represents the amount of assets put into the business by the proprietors or the stockholders. In a partnership, it is represented by the partners' capital accounts, and in a corporation by the capital stock account. For the purpose of classification, it might be called a liability because it represents, in a healthy concern, the amount owing to the proprietors; yet this is not strictly correct, because in the case of liquidation, the outside creditors must be paid off first regardless of proprietors' claims. If there is anything left, it goes to the proprietors; otherwise, they get nothing. Indeed, if the assets are not sufficient to satisfy the creditors, the private estate of each partner may be drawn on for that purpose. In the case of a corporation, the stockholders are not, of course, liable for more than their stock holdings. The net worth of a concern is usually determined at the end of each fiscal period after the net profit has been credited to the proprietor's account. The profit thus credited may then be withdrawn from the business or left therein as a further investment. The original investment plus the net profit, or minus the net loss, is the proprietor's **capital** or **net worth.** The capital of a corporation is represented by its capital stock plus any surplus earnings remaining undistributed. In any case, the capital of a concern is composed of the excess of its assets over its liabilities to the outsiders. This is known also as *net worth*, *present worth*, and *financial condition*. It should be kept in mind that capital is always an asset, or made up of many assets, while the capital stock or capital account is a credit representing the amount of capital invested in the business.

5. Fixed assets comprise the properties, premises, or resources of a permanent nature, not intended for sale or exchange, with which the business is carried on. Things that can be used over and over again for the same purpose, as land, buildings, machinery, fixtures, implements, tools, delivery equipment, patterns, and drawings, are also termed *capital assets*, because they compose a large part of the capital or investment in the business. They are known as fixed assets in contradistinction to the current, or floating, assets, which are mentioned later. These assets are usually maintained in the accounts at the cost price in order to show at any time the original value of fixed properties on hand. At the end of each fiscal period a specific per cent. thereof is usually set aside out of profits as a reserve to provide for depreciation of the properties. It must be kept in mind, however, that from time to time additional maintenance charges are necessary for up-keep, repairs, and improvements. These should invariably be included in the running expenses of the business, as they do not as a rule add to the value of the property. Land does not depreciate, ordinarily; therefore, the customary charges for maintenance and depreciation are not necessary. In case the land declines in value because of unfavorable surroundings, the book figures should be written down to a safe valuation and such reduction charged against surplus. As it is not an operating expense, and is the result of conditions over which the business may not have control, it is obviously not a charge against current profits.

6. Current assets include all circulating or changing assets in which the firm is dealing or with which it is possessed. The term comprises cash or those assets which can be readily converted into cash, as bank deposits, merchandise, raw material, accounts and notes receivable, rents receivable, investments, etc. These are frequently referred to as *quick*, *floating*, or *liquid assets*.

7. Investments include real estate, mortgages, bonds and stocks, and any other properties that may have been purchased as an investment. When preparing the balance sheet, such

securities as can be easily realized on may be included among the current assets, but if there are many it is preferable to group them under investments. In some cases investment in securities is made for the purpose of controlling the acts of the issuing company. In such cases it would obviously be wrong to classify them with the current assets, because they are held more or less permanently and could not be disposed of without affecting the operating results of the business.

8. **Speculative assets** comprise such assets as are of a speculative nature and those purchased by the company for the purpose of speculation. They may include stocks, bonds, notes, property, real estate, and so forth.

9. **Wasting assets** include assets that are being gradually depleted or used, as wells, mines, quarries, clay and sand pits, and wooded forests. The practice is to provide for a gradual diminution or extinguishment of such properties over the period for which they are expected to exist. In the case of a mine, if the engineers estimate that it will be depleted in 50 years, then 2 per cent. of the value of the mine should be written off each year. At this rate, by the end of 50 years there will have been enough reserved to offset the original cost of the depleted mine. Outlays for additions and construction should also be gradually spread over the remaining estimated life of the mine.

10. **Intangible assets** are those having a value somewhat undetermined, as good-will, franchises, patents, trade-marks, copyrights, incorporation expenses, and bonuses. Sometimes they are called *passive assets*. Often the cost of such assets is spread over a term of 3 or 4 years instead of charging them all to the running expenses of the year in which they were incurred; this applies particularly to such capitalized charges as incorporation expenses, special advertising, and extraordinary expenditures. Prepaid expenses such as taxes, interest, and insurance may be included under this general class and legitimately carried on the balance sheet under the caption of "prepaid items," "deferred charges" or "deferred assets." While these are of definite value they are not exactly of a tangible nature.

11. Contingent assets are assets whose genuineness or ultimate value depends on some contingency. In other words, they are assets in anticipation, and may or may not be realized, as profits anticipated, disputed claims, judgments, items in suspense, doubtful debts, contracts to be filled, etc. These should not be entered on the books or the balance sheet as genuine assets because their ultimate value is so much in doubt. The preferable way is to make reference to them briefly in a foot-note to the balance sheet.

12. Fixed liabilities include bonds and debentures, mortgages, long-time loans, and purchase-money obligations. As they are not to be liquidated for a definite number of years, it is customary to refer to them as *fixed*. They are also termed *capital liabilities*. The capital stock of a corporation is sometimes referred to as a liability, but this is obviously a misnomer, because the stockholders are not creditors of the corporation and their claims as owners cannot be satisfied until all other creditors have been paid.

13. Current liabilities include the usual business obligations that are incurred in the daily conduct of business, as notes and accounts payable, loans, and short-time obligations. They may include also the accrued interest and other obligations payable, as taxes, wages, water rates, dividends, unpaid coupons, rent, damage claims, and other current items.

14. Contingent liabilities include claims or obligations for which the company is liable and which may or may not have to be paid. They comprise such items as notes of customers under discount at the bank on which the company is liable as indorser, notes transferred, time drafts drawn on others, disputed claims, judgments, accommodation notes, indorsements, guarantees, uncompleted contracts, or claims.

15. Reserve accounts are not liabilities, but are negatives to accounts that appear among the assets. For example, the reserve for depreciation of real estate is a negative to the real-estate account, and may either be shown on the liability side of the balance sheet or else be deducted from the original value

on the assets side. This applies also to reserves for bad debts and any other reserves belonging to properties.

16. The **balance sheet** is a statement of the assets, liabilities, and net worth of a business concern, at any particular time, arranged in such a way as to show clearly its financial condition. It is prepared at the end of each fiscal year, and sometimes monthly, for the purpose of exhibiting to the management the correct status of the concern at that time. The information thus conveyed enables the proprietor to administer affairs wisely and judiciously.

The balance sheet is so called from the old balance account, which was formerly used as a ledger account. All the accounts remaining open after the profit-and-loss accounts were closed were obviously either assets or liabilities and therefore were closed into the balance account. This balance account then showed assets on the debit side and liabilities on the credit. The balance, of course, constituted the proprietor's net worth. This, in brief, is the origin of the balance sheet, which was afterwards copied on a sheet with more or less additional information for the benefit of the proprietor.

17. The **statement of assets and liabilities** is a statement of the assets, liabilities, and net worth of a concern at any particular time, but it is not necessarily a balance sheet, because it may not contain the balancing feature that comprises an analysis of the proprietor's investment and his net profit. A balance sheet is compiled from a set of double-entry books and exhibits the financial condition of the business, but a statement of assets and liabilities may contain items taken partly from a set of single-entry books and gleaned partly from various other sources. It is frequently necessary to compile the assets and liabilities from various sources other than from the ledger accounts, and this is especially true when single-entry books have been used, because they contain only a part of the assets and liabilities. It is obvious that the term *balance sheet* in this case would be a misnomer; yet the terms are used synonymously without regard to the sources of information.

ARRANGEMENT AND FORMS OF BALANCE SHEET

18. The balance sheet is usually arranged in the form of a ledger account, with the assets on the left-hand side and the liabilities on the right. The difference between the assets and the liabilities represents the net worth of the proprietor, and is ordinarily shown among the liabilities, as is illustrated later. A net insolvency exists when the liabilities exceed the assets. The English form of balance sheet is used extensively in England and to some extent in Canada; it places the liabilities on the left-hand side and the assets on the right. This form is used to some extent in the United States, especially by English accountants, but general usage in most cases prescribes the regular form illustrated later. In any case, when the assets, liabilities, and net worth are recorded on their respective sides, the statement will *balance*—it becomes a balance sheet. The proper form of balance sheet can be better understood by studying illustrations of them; therefore, it is advisable to study and copy carefully the forms here illustrated, which are in general the standard and approved modern type.

19. As has been stated, the balance sheet shows a concern's financial condition as on a particular date. In addition to showing the present net worth of the proprietor, the balance sheet has an additional mission, namely, that of exhibiting as clearly as possible the various kinds of assets and liabilities in proper sequence. In order to exhibit this information most advantageously, accountants usually follow their own inclinations, and they are frequently governed by the tastes or ability of the clients to grasp the information set forth. It is advisable in any case to have the statements arranged in a simple, readable shape, so that any one may be able to comprehend the various details set forth.

20. The balance sheet is known also as the statement of assets and liabilities, the statement of resources and liabilities, the statement of condition, and the statement of affairs. No matter what name is given, it is obvious that the exhibit should be correlated and divided in such a way as to present as

much information as possible without unnecessary explanations. Whether or not it shall be condensed or elaborate depends on conditions, and to some extent on the intelligence of the person who is expected to read it. The statements made up for the immediate information of the proprietor or directors are usually elaborate in detail and accompanied by supplementary schedules; but the balance sheets made up for publication or to be supplied to the stockholders, are generally more condensed. There is a double reason for this; first, because it is not necessary to print all the details or to spend money in doing so, and second, it may not be prudent to publish information that should be known only to the directors. Information given out in this way might be used by competing institutions to the company's disadvantage. The form of balance sheet in most general use among the larger corporations places the assets on the left-hand page and the liabilities and net worth on the right, and yet many first-class accountants prefer the form that lists all assets first and then follows with the liabilities. This is undoubtedly a desirable form and is to be commended for small concerns because all the information can be easily shown on a single page.

ANALYTICAL FINANCIAL STATEMENTS

WHAT STATEMENTS SHOULD SHOW

21. In accounting for any class of transactions that involve profits or losses, the following may be stated as forming part of the conditions that should be carefully observed:

(*a*) The accounting procedure should clearly represent the transactions accounted for.

(*b*) Financial statements, summarizing the results, should be unmistakable as to the nature and value assigned to each item presented.

(*c*) Financial statements should be supported by analytical details where necessary, to elucidate completely items that, in total, represent a group of units.

Balance Sheet of The J. G. Burden Company

At December 31, 1921, and Comparison as at December 31, 1920

		Dec. 31 1921	Dec. 31 1920	Increase	Decrease
Assets:					
Current Assets					
Cash at banks and on hand		$14,520.00	$15,600.00		$1,080.00
Accounts receivable (collectible)		36,150.00	36,400.00		250.00
Notes receivable (collectible)		1,200.00	1,400.00		200.00
Merchandise inventory, cost value, below market value		35,460.00	24,150.00	$11,310.00	
Total current assets		$87,330.00	$77,550.00	$11,310.00	$1,530.00
Office furniture, fixtures, and equipment, cost value, no provision for depreciation		3,250.00	3,250.00		
Total assets		$90,580.00	$80,800.00	$11,310.00	$1,530.00
Liabilities:					
Current Liabilities					
Accounts payable		$21,000.00	$18,000.00	$ 3,000.00	
Notes payable		500.00	300.00	200.00	
Total current liabilities		$21,500.00	$18,300.00	$ 3,200.00	
Common Capital Stock, issued and fully paid, 500 shares		50,000.00	50,000.00		
Surplus		10,000.00	10,000.00		
Undivided Profits		9,080.00	2,500.00	6,580.00	
Amount at December 31, 1920	$2,500.00				
Net income, year 1921, per trading and Profit-and-Loss Statement	6,580.00				
	$9,080.00				
Total liabilities and capital		$90,580.00	$80,800.00	$ 9,780.00	

Fig. 1

TRADING AND PROFIT-AND-LOSS STATEMENT of THE J. G. BURDEN COMPANY

For the Year Ended December 31, 1921, and Comparison With the Year Ended December 31, 1920.

			Year Ended December 31, 1921				Year Ended December 31, 1920			
				Per Cent.	Per Cent.			Per Cent.	Per Cent.	
Sales:			$40,500.00				$38,500.00			
Deduct: Returns and allowances			500.00				500.00			
Net sales						$40,000.00				$38,000.00
Cost of Sales:										
Merchandise inventory, Beginning			24,150.00				17,780.00			
Purchases during the year. Net			25,095.00				20,100.00			
Freight inward			765.00				565.00			
			50,010.00				38,445.00			
Deduct: Merchandise inventory, Ending			35,460.00				24,150.00			
Cost of sales					36.375	14,550.00			37.618	14,295.00
Gross trading profit				63.625		25,450.00		62.381		23,705.00
Expenses:										
Selling Expenses:	1921	1920	9,015.00		22.537		8,400.00		22.105	
Salaries and commissions	$3,250.00	$ 3,000.00		8.125				7.895		
Traveling expense	4,125.00	3,900.00		10.312				10.263		
Freight and delivery out	1,220.00	1,100.00		3.050				2.895		
Sales office exp.	420.00	400.00		1.050				1.052		
	9,015.00	8,400.00		22.537				22.105		

11 Administrative Expenses:			10,375.00		25.938		10,320.00		27.158	
Salaries of officers	5,000.00	5,000.00		12.500				13.158		
Clerical salaries	3,000.00	3,000.00		7.500				7.895		
Rent	1,500.00	1,500.00		3.750				3.947		
Postage	550.00	500.00		1.375				1.316		
Telephone and telegraph	250.00	250.00		.625				.658		
Insurance	75.00	70.00		.188				.184		
	$10,375.00	$10,320.00		25.938				27.158		
Total expenses						19,390.00				18,720.00
Net profit for the year					15.150	6,060.00			13.119	4,985.00
					100.000				100.000	
Other income, cash discounts on purchases						520.00				405.00
Net income						$ 6,580.00				$ 5,390.00

Fig. 2

Schedule No. 1—Details of Accounts Receivable at December 31, 1921

Debtor	Amount	Overdue			Valuation			Remarks
		1 Month	2 Months	3 Months	Good	Doubtful 50 Per Cent.	Bad 100 Per Cent.	
Adams & Co.	$ 4,170.00				$ 4,170.00			Pays regularly
Curtis, A. J.	2,190.00	$1,500.00	$690.00		2,190.00			Fully secured. Current transactions for cash
Cohn & Myers	775.00				775.00			Pays regularly
Devon & Co.	6,510.00				6,510.00			Very prompt
Harrison, H. E.	2,487.00				2,487.00			Very prompt
Inman & Cox	217.00	217.00			217.00			Guaranteed
Lincoln & Co.	5,420.00	5,420.00			5,420.00			Is executing our order for purchases, $5,250
Penfield, K.	3,140.00				3,140.00			Pays regularly
Ranney, J.	4,710.00				4,710.00			Pays regularly
Stacey & Good	1,531.00				1,531.00			Very prompt
Simpson & Son	1,650.00				1,650.00			Very prompt
Travis, J. J.	1,718.00				1,718.00			Very prompt
Watson & Co.	1,632.00				1,632.00			Very prompt
	$36,150.00	$7,137.00	$690.00		$36,150.00			

Fig. 3

(*d*) A clear understanding of the information conveyed by financial statements is greatly assisted by the inclusion of details that exhibit comparisons between one period and another.

A balance sheet and form of income statement as given in Figs. 1 and 2 may be well arranged with respect to the current condition of a business, but, unless supporting schedules and comparisons are shown for the balance sheet, and comparative percentages are shown for the income statement, neither statement will convey complete information to the mind of an executive.

The balance sheet of the J. G. Burden Company, for instance, would not convey information as complete as an executive would ordinarily require. The balance sheet given in Fig. 1 shows:

Current assets	$87,330.00
Current liabilities	21,500.00
Excess, current assets over current liabilities	$65,830.00

This condition indicates an abundant working capital, but, if the accounts and notes receivable are overvalued, the excess

Schedule No 2—Details of Notes Receivable, at December 31, 1921

Maker	Dated	Due	Amount	Reserve	Remarks
	1921	1922			
Johnson & Co.	Dec. 1	Jan. 5	75.00		Well rated
Brown & Jones	Oct. 1	Jan. 15	120.00		Well rated
Griffin, J.	Nov. 15	Feb. 15	450.00		Good endorsement
Coulter, R.	Sept. 6	Jan. 6	510.00		Good endorsement
Ross & Bro.	Dec. 8	Feb. 8	45.00		Well rated
			$1,200.00		

Fig. 4

of current assets over current liabilities may be considerably reduced. In this event, the surplus—possibly, to some extent—and the undivided profits, would be correspondingly overstated. It is good accounting practice to support balance-

General Balance Sheet of The Stevens and Ross Company

At Dec. 31, 1921, and Comparison at Dec. 31, 1920

	Dec. 31 1921	Dec. 31 1920	Increase	Decrease
Assets:				
Current Assets:				
Cash at banks and on hand	$ 40,500.50	$ 45,120.70		$ 4,620.20
Accounts receivable	350,710.60	275,610.40	$ 75,100.20	
Notes receivable	5,120.50	8,160.15		3,039.65
Accrued interest receivable	320.00	175.00	145.00	
Total current assets	396,651.60	329,066.25	75,245.20	7,659.85
Deferred Charges:				
General supplies	6,050.70	5,240.60	810.10	
Insurance unexpired	2,110.20	712.50	1,397.70	
Interest prepaid on accounts payable	3,116.15	1,550.26	1,565.89	
Taxes prepaid	3,218.22	2,750.12	468.10	
Total deferred charges	14,495.27	10,253.48	4,241.79	
Investments:				
Capital stock of affiliated companies	350,000.00	50,000.00	300,000.00	
Deposit:				
Trustee of sinking fund for redemption of bonds	15,000.00	5,000.00	10,000.00	
Properties:	705,697.04	505,697.04	200,000.00	
Total assets	1,481,843.91	900,016.77	589,486.99	7,659.85

Liabilities:				
Current Liabilities:				
Accounts payable	127,618.30	48,410.20	79,208.10	
Notes payable	84,120.10	30,460.14	53,659.96	
Rent accrued	2,500.00	1,500.00	1,000.00	
Total current liabilities	214,238.40	80,370.34	133,868.06	
Reserves:				
Depreciation of properties	35,455.51	25,000.00	10,455.51	
Bad debts	2,150.00	3,000.00		850.00
Contingent reserve	5,000.00	15,000.00		10,000.00
Total reserves	42,605.51	43,000.00	10,455.51	10,850.00
Capital stock:				
First preferred, 6 per cent. cumulative	150,000.00	150,000.00		
Second preferred, 6 per cent.	300,000.00		300,000.00	
Common: Issued	550,000.00	550,000.00		
Less-in treasury, reacquired	50,000.00	50,000.00		
Outstanding	500,000.00	500,000.00		
Funded Debt, 5 per cent. Gold Bonds	200,000.00	100,000.00	100,000.00	
Surplus	75,000.00	26,646.43	48,353.57	
Total liabilities and capital	$1,481,843.91	$900,016.77	$592,677.14	$10,850.00

Fig. 5

sheet valuations by means of detailed schedules, made part of the balance sheet. In the case of accounts receivable, the supporting schedule should be in a form somewhat similar to that given in Fig. 3.

22. The details shown on Schedule No. 1, Fig. 3, appear to sustain the balance-sheet valuation for accounts receivable.

Explanation of Increases and Decreases

Increase of Capital Invested:				
Properties			$200,000.00	
Deduct:				
Increase in amount reserved for depreciation			10,455.50	$189,544.49
Investments				
Capital stock of affiliated companies				300,000.00
Sinking Fund Deposit				10,000.00
				$499,544.49
Decrease of Current Capital:				
Increased Liabilities:				
Accounts payable			79,208.10	
Notes payable			53,659.96	
Rent accrued			1,000.00	
			$133,868.06	
Deduct:				
Increased Assets:				
Accounts receivable	$75,100.20			
Reserve decreased	850.00	$75,950.20		
Accrued interest receivable		145.00		
		$76,095.20		
Less:				
Decreased Assets				
Cash	$ 4,620.20			
Notes receivable	3,039.65	7,659.85	$ 68,435.35	$ 65,432.71
Net tangible capital increased				$434,111.78
Net intangible capital increased:				
General supplies			$ 810.10	
Insurance unexpired			1,397.70	
Interest prepaid—on accounts payable			1,565.89	
Taxes prepaid			468.10	4,241.79
Increase in capital employed				$438,353.57

Fig. 6

At the same time, losses from bad debts are practically inevitable when sales are made on credit. Therefore, the ques-

tion for an executive to decide is, as to the commercial prudence of setting up a reserve, even though the outstanding accounts appear to be fully collectible.

When a reserve is based on percentages shown on the schedule, the schedule provides all the details necessary for a journal entry, to set up the reserve, and for making proper notation on each ledger account affected. Subsequent adjustments of the reserve may then be made, as the various accounts are fully paid, or finally written off, as worthless.

The reference to Schedule No. 1, is equally applicable to Schedule No. 2, of notes receivable, shown in Fig. 4.

23. With respect to the balance-sheet valuation of the merchandise inventory, it is good practice to indicate on the inventory sheets as to whether the merchandise is actively

Sources From Which Net Increase Was Obtained

Capital Stock:		
Second preferred issued		$300,000.00
Funded Debt:		
Gold bonds, 5 per cent., issued		100,000.00
Surplus:		
Increased amount	$48,353.57	
Less—Decrease in the contingent reserve	10,000.00	38,353.57
		$438,353.57

Fig. 7

current, slow moving, or obsolete. These details may then be summarized, and a supporting schedule prepared for use with the balance sheet. It is a well-understood accounting practice that merchandise inventories should be valued at cost or market, whichever is the lower. Therefore, the source from which the prices were obtained should be entered upon the inventory sheets.

The comparative statement shown on the simplified balance sheet, accounts for the differences at a glance. The advantages from a comparative statement are more fully shown by the illustration of a more complex balance sheet of the Stevens and Ross Company shown in Fig. 5.

The statement of increases and decreases, between the comparative figures of the balance sheet, enables the preparation of the explanation shown in Fig. 6.

The classified statement of net increase in the amount of capital employed presents the matter to an executive in a readily comprehensible manner. In order that he may be informed as to the sources from which the net increase was obtained, the statement in Fig. 7 should be submitted.

While the details shown on the balance sheet account for the increase or decrease for each item, the net effect on the various classifications is not apparent unless shown by additional statements somewhat similar to that given in Fig. 7.

TRADING AND PROFIT-AND-LOSS STATEMENT

24. As a rule, an executive will form a clearer conception of results when they are expressed by percentages. An analysis and comparison of the percentages that appear in the statement, Fig. 2, is shown in Fig. 8, which is a summary of results for the year ended December 31 1921.

	Percentages	
	Increase	Decrease
Cost of sales		1.243
Selling expenses	.432	
Administrative expenses		1.220
Net profit	2.031	
	2.463	2.463

Net sales, increase, $2,000
Net profit, year 1921, 15.15 per cent.

Fig. 8

If such a statement were submitted, the attention of an executive would be immediately drawn to the salient points of his business. He would be spared the effort to get at the information, most certainly required, in his own way. The particular points of interest shown by the statement are:

(*a*) Increase in sales, $2,000.
Do the increased sales satisfactorily compensate for the increase of .432 per cent. in selling expenses?

(*b*) The administrative expenses have decreased 1.22 per cent. owing to the fact that the expenses are largely of a fixed character; therefore, an increase of sales tends to lower the percentage administrative cost.

(c) Is the net profit of 15.15 per cent. for the year 1921 a fair return from the business?

25. The illustrations are confined to simple conditions, in order that the principles may be clearly perceived. The statements may readily be applied to a business divided into several departments, either by comparing total results extended to departmental columns, or, if departments are numerous, a statement may be prepared to show the results for each department, finally summarized for the business as a whole.

SELF-EXPLANATORY FINANCIAL STATEMENTS

26. The sufficiency or insufficiency of a financial statement depends entirely on the detail shown, and the manner in which it is explained. An ideal financial statement is one that leaves no essential point to be further explained. The term *financial statement* is to be considered as including the statement proper, together with any supporting schedules or exhibits that may accompany it as part of the statement proper.

The following illustrations are intended to show the particular points in financial statements which usually require explanation. As a beginning, Fig. 9 is given, which shows Trial Balances of Curtis Manufacturing Company at December 31, 1921, and at December 31, 1920.

On examination of the balances at December 31, 1921, the following appear to require explanation:

1. *Cash on hand*—As to why the amount is so large.
2. *Accounts receivable*—As to the basis on which the reserve was made.
3. *Notes receivable*—As to security, collectibility, etc.
4. *Merchandise inventory*—As to the basis of valuation, and availability for current purposes.
5. *General supplies*—As to the increased amount, as compared with the inventory at December 31, 1921.
6. *Machinery and equipment*—As to basis for depreciation, and nature of the additions during 1921.

TRIAL BALANCES, CURTIS MANUFACTURING COMPANY

At December 31, 1921, and December 31, 1920, After Closing of the Accounts at the Respective Dates

			1921		1920	
			DR.	CR.	DR.	CR.
Cash on hand			$ 8,270.20		$ 812.60	
Cash at Banks:						
First National			85,116.14		110,117.32	
Central Trust			76,122.41		54,234.64	
Accounts Receivable:	1921	1920	321,604.02		262,800.54	
Outstanding	$328,144.20	$266,918.70				
Less Reserves	6,540.18	4,118.16				
	$321,604.02	$262,800.54				
Notes Receivable			12,127.60		43,034.32	
Merchandise Inventory:						
Finished stock			87,506.82		54,610.20	
Work in process			25,500.00		37,250.00	
Materials			100,993.18		103,266.82	
General supplies			6,817.20		3,408.60	
Machinery and Equipment:			401,536.98		374,868.00	
	1921	1920				
Balances	$466,520.40	$416,520.40				
Reserve	64,983.42	41,652.40				
	$401,536.98	$374,868.00				

21	Furniture and Fixtures:			$ 5,542.72		$ 4,896.10	
		1921	1920				
	Balances	$7,518.60	$6,120.12				
	Reserve	1,975.88	1,224.02				
		$5,542.72	$4,896.10				
	Insurance:						
	Fire insurance unexpired			1,200.00		1,050.00	
	Liability insurance, adjustment to pay roll			122.00			
	Accounts payable				$ 153,233.48		$ 175,828.74
	Notes payable				40,141.10		60,322.10
	Dividend payable				30,000.00		
	Capital stock				600,000.00		570,000.00
	Reserve for taxes				30,000.00		20,000.00
	Profit and loss				114,886.39		94,198.30
	Surplus				164,198.30		130,000.00
				$1,132,459.27	$1,132,459.27	$1,050,349.14	$1,050,349.14

Fig. 9

Balance Sheet of Curtis Manufacturing Company

At December 31, 1921, and Comparison with December 31, 1920

	Dec. 31 1921	Dec. 31 1920	Increase	Decrease
Assets:				
Current Assets:				
Cash at Banks and on Hand:				
First National	$ 85,116.14			
Central Trust	76,122.41			
On Hand—Schedule No. 1	8,270.20			
Total Cash	$ 169,508.75	$ 165,164.56	$ 4,344.19	
Accounts Receivable	$ 328,144.20	$ 266,918.70		
Less reserves	6,540.18	4,118.16		
Total—Schedule No. 2	$ 321,604.02	$ 262,800.54	$58,803.48	
Notes Receivable—Schedule No. 3	$ 12,127.60	$ 43,034.32		$30,906.72
Merchandise Inventory—Schedule No. 4:				
Finished stock	$ 87,506.82	$ 54,610.20	$32,896.62	
Work in process	25,500.00	37,250.00		$11,750.00
Raw materials	100,993.18	103,266.82		$ 2,273.64
Total merchandise inventory	$ 214,000.00	$ 195,127.02	$18,872.98	
General Supplies—Schedule No. 5	6,817.20	3,408.60	3,408.60	
Total current assets	$ 724,057.57	$ 669,535.04	$54,522.53	
Machinery and Equipment—Schedule No. 6	$ 466,520.40	$ 416,520.40	$50,000.00	
Less reserve for depreciation	64,983.42	41,652.40	23,331.02	
Total machinery and equipment	$ 401,536.98	$ 374,868.00	$26,668.98	

23 Furniture and fixtures—Schedule No. 7		$ 7,518.60	$ 6,120.12	$ 1,398.48	
Less reserve for depreciation		1,975.88	1,224.02	751.86	
Total furniture and fixtures		$ 5,542.72	$ 4,896.10	$ 646.62	
Insurance					
Fire insurance unexpired		$ 1,200.00	$ 1,050.00		
Liability insurance adjustment to pay roll		122.00			
Total insurance		1,322.00	1,050.00	272.00	
Total assets		$1,132,459.27	$1,050,349.14	$82,110.13	
Liabilities:					
Current Liabilities:					
Accounts payable		$ 153,233.48	$ 175,828.74		$22,595.26
Notes payable		40,141.10	60,322.10		20,181.00
Dividend payable		30,000.00		$30,000.00	
Total current liabilities		$ 223,374.58	$ 236,150.84		$12,776.26
Capital stock outstanding (authorized, $750,000)		$ 600,000.00	$ 570,000.00	$30,000.00	
Reserve for taxes		$ 30,000.00	$ 20,000.00	$10,000.00	
Surplus:					
At commencement of perioa		$ 224,198.30	$ 130,000.00	$94,198.30	
Profits for periods		114,886.39	94,198.30	20,688.09	
		$ 339,084.69	$ 224,198.30	$114,886.39	
Dividends—Paid dividend No. 1	$30,000.00				
Payable, dividend No. 2	30,000.00	60,000.00		60,000.00	
Total surplus		$ 279,084.69	$ 224,198.30	$54,886.39	
Total Liabilities and capital		$1,132,459.27	$1,050,349.14	$82,110.13	

Fig. 10

7. *Furniture and fixtures*—As to basis for depreciation, and nature of additions during 1921.

27. The requisite explanations should be made upon schedules submitted with the balance sheet, as a part thereof. The accountant in charge is assumed to prepare the financial statements; therefore, supporting schedules should be as complete as would be required for an independent audit of the particular accounts to which the schedules refer.

From the foregoing trial balances, the following are to be prepared:

Balance sheet at Dec. 31, 1920, and at Dec. 31, 1921 (a single form) and comparison. This is shown in Fig. 10.

Supporting schedules, No. 1 to No. 7, prepared primarily to show the requisite form, such assumed figures being

SCHEDULE NO. 1

Details of Cash on Hand, $8,270.20

Currency:		$ 726.50
Undeposited checks:		
Received after banking hours Dec. 31, 1921—		
Deposited Jan. 2, 1922:		
Early & Co.	$ 462.10	
Dunn Bros.	1,220.40	
J. D. Farwell	3,116.12	
C. H. Amos	927.22	
Frankel & Co.	827.13	
Judd & Judd	990.73	7,543.70
As above		$8,270.20

FIG. 11

used as may be necessary to show clearly the purpose of the schedules. These are shown in Figs. 11 to 17, inclusive.

An explanatory statement is to be prepared, accounting for the general financial result from the balance-sheet comparisons. This is shown in Fig. 18.

No details are given of the nominal accounts for the 2 years; the following statements, however, are to be prepared from assumed representative figures:

Manufacturing and Profit-and-Loss statement for the year 1920, and for 1921 (a single form), together with percentages necessary for a critical comparison.

SCHEDULE NO. 2

Details of Accounts Receivable, $321,604.02

Debtor	Outstanding Dec. 31 1921	Analysis					Remarks
		Good	Overdue			Reserved in Full	
			30 Days	60 Days	90 Days or Over (80%)		
Totals	$328,144.20	$278,322.73	$22,120.40	$8,272.27	$18,423.27	$1,005.53	
Amount Reserved	6,540.18		1,000.00	850.00	3,684.65	1,005.53	
Collectible	$321,604.02	$278,322.73	$21,120.40	$7,422.27	$14,738.62		

FIG. 12

The manufacturing and profit-and-loss statement is assumed to be as shown in Fig. 19.

28. Schedule No. 1.—In the absence of the Schedule No. 1 shown in Fig. 11, an explanation would probably be required as to the reason for carrying an apparently excessive amount of cash on hand.

29. Schedule No. 2.—The accounts receivable require analysis somewhat similar to that indicated in Fig. 12. The trial balance to be taken from the customers' ledgers should be arranged to show the details required for the schedule.

Accounts listed Good will be accounts not overdue and accounts which, though overdue, are secured, or known to be collectible.

Accounts not overdue may be shown in total only, without reference to the name of the debtors. If overdue, all informa-

SCHEDULE NO. 3
Notes Receivable, $12,127.60

This schedule should give the details:
- Name of maker.
- Date drawn.
- Date due.
- Amount of note.
- Interest, if any.
- Special conditions, if any, respecting payment.
- Endorsements, if any.
- Total of partial payments, if any.
- Date of last partial payment.
- Unpaid balance.
- Amount of reserve, if any.
- Necessary explanations.

FIG. 13

tion required by the schedule should be given, particularly under Remarks; in order that efforts for collection may be shown, and explanations given respecting security, etc.

The purpose of the schedule is to show the sufficiency of reserves for accounts that may appear to be of doubtful collectibility, or worthless.

30. Schedule No. 3.—The purpose of Schedule No. 3, shown in Fig. 13, is to show the status of each note, and to support the amount shown on the balance sheet as being collectible.

SCHEDULE No. 4

Merchandise Inventory—Valued at the Lower—Cost or Market

Finished Stock (Description)		Analysis			Raw Materials (Description)		Analysis		
		Current	Slow Moving	Obsolete			Current	Slow Moving	Obsolete
Total	$87,506.82	$65,500.00	$15,275.00	$6,731.82	Total	$100,993.18	$85,760.50	$10,230.10	$5,002.58

FIG. 14

31. Schedule No. 4.—Schedule No. 4, shown in Fig. 14, may readily be prepared from a detailed inventory. The currently usable inventory may be grouped—in one amount—under briefly stated classifications. Slow moving and obsolete items should be stated with sufficient detail to enable identification. The object of the schedule is to inform the management of the amount of capital that is more or less unproductively employed. The information will probably lead to the employment of methods for releasing the unproductive capital.

SCHEDULE NO. 5

General Supplies, $6,817.20

The schedule should show:
Various classifications of the supplies.
Quantity of each.
Price and amount for each.

FIG. 15

32. Schedule No. 5.—The balance sheet shows an increase of $3,408.60, in general supplies, as compared with the previous period. A schedule prepared as shown in Fig. 15 will enable the management to determine the necessity for carrying the larger amount.

33. Schedule No. 6.—The balance sheet shows net additions amounting to $50,000, during the year 1921. New

SCHEDULE NO. 6

Machinery and Equipment, $401,536.98

Cost value at December 31, 1920		$416,520.40
Additions during 1921:		
Machine, L 20 (Description)	$ 5,250.50	
Machine, L 21 (Description)	10,280.50	
Machine, B 15 (Description)	20,870.00	
Machine, P 10 (Description)	13,599.00	50,000.00
Cost value, at December 31, 1921		$466,520.40
Reserve for Depreciation:		
At Dec. 31, 1920	41,652.40	
For 1921—practically 5 per cent.	23,331.02	64,983.42
Book value, at December 31, 1921		$401,536.98

FIG. 16

machinery, in excess of $50,000, may have been added, and some mechanical units retired, thus producing a net increase

of $50,000. The increase requires explanation and the schedule should therefore show data similar to that in Fig. 16.

If mechanical units were retired from service during the period, the cost value would be credited to the ledger account, their residual value being charged to cash, if they were sold, or to a special account if they were not sold, and the amount reserved for depreciation would require adjustment according to the actual conditions. For example, a machine, having a cost value of $3,000, and an accumulated reserve for depreciation of $1,500, is retired from service and sold for $500. After the necessary adjustments are made, the accounts affected would be as shown in Fig. 17.

The adjustment to be made on the schedule is apparent from the foregoing. In view of the fact that the final loss of

	Dr.	Cr.
Machinery and Equipment		
Machine No. 1 purchased	$3,000.00	
Sundries, Machine No. 1 retired		$3,000.00
Reserve for Depreciation		
Depreciation, Machine No. 1		$1,500.00
Machinery and Equipment—Machine No. 1 retired	$1,500.00	
Cash		
Machinery and Equipment—Machine No. 1 retired	$ 500.00	
Surplus:		
Loss—Machine No. 1 retired	$1,000.00	

Fig. 17

$1,000 is mainly applicable to prior periods, the amount is chargeable against surplus.

Schedule No. 7
Furniture and fixtures, $5,542.72

34. Schedule No. 7.—The schedule explaining the item, Furniture and Fixtures $5,542.72, would exhibit details of practically the same nature as Schedule No. 6 shown in Fig. 16.

35. Current Liabilities.—If the financial operations of the business are not controlled by a budget system, a schedule of current liabilities, as shown in Fig. 18, would probably be required, summarizing the obligations with respect to maturities, thus enabling the comptroller, or financial manager, to formulate his financial policy.

36. Manufacturing and Profit-and-Loss Statement.—The manufacturing and profit-and-loss statement, Fig. 19, shows comprehensive details for each class of expenditure, together

EXPLANATORY STATEMENT

Accounting for Financial Result From Balance-Sheet Comparisons

Increase of Capital Invested:			
Machinery and equipment		$26,668.98	
Furniture and fixtures		646.62	$27,315.60
Increase of Current Capital:			
Cash		$ 4,344.19	
Accounts receivable		58,803.48	
		$63,147.67	
Less—Decrease, Notes receivable		30,906.72	
		$32,240.95	
Add—Decrease, Liabilities:			
Current liabilities	$12,776.26		
Less—Increase, tax reserve	10,000.00	2,776.26	35,017.21
Increase—Merchandise Inventory			18,872.98
Net tangible capital increase			$81,205.79
Net intangible capital increase:			
General supplies	$3,408.60		
Fire and liability insurance	272.00		3,680.60
Increase of capital employed			$84,886.39

The following were the sources from which the increase was obtained:

From sale of capital stock	$30,000.00
From increase of surplus	54,886.39
	$84,886.39

FIG. 18

with the percentage relation between each class of expenditure and the total sales. Such details materially assist an executive, in a critical examination of results.

DETAILED FINANCIAL STATEMENTS

37. Necessity for Detailed Statements.—The exemplification of self-explanatory financial statements just given applied to a business wholly without departmental classifications. The net results from the business related to the business as a whole, without regard to profits or losses contributed by individual products or commodities.

When a business includes several distinct lines, it is quite as necessary to ascertain the profits or losses from each line, as

Curtis Manufacturing Company—

For the Year Ended December 31, 1921, a

Sales—Net			$654
Cost of Sales:			
Materials		$237,455.15	
Direct labor		124,970.10	
Indirect charges		53,538.43	
Cost of sales			415
Gross Profit			$239
Expenses			
Selling Expenses:		$ 61,309.76	
Rent—Sales office	$ 3,000.00		
Salaries—Official	7,500.00		
Salaries—Clerks	5,500.00		
Salaries—Salesmen	6,250.00		
Commissions—Salesmen	7,350.20		
Traveling expenses	10,170.10		
Stationery and printing	2,550.00		
Postage	1,500.00		
Telephone and telegrams	970.00		
Advertising	15,500.00		
Depreciation — Furniture and fixtures	323.31		
Insurance	75.90		
Sundry unclassified expenses	620.25		
	$61,309.76		
Administrative Expenses:		$ 62,810.97	
Rent of offices	$ 4,500.00		
Salaries—Official	10,700.00		
Salaries—Clerks	8,500.00		
Stationery and printing	3,000.00		
Postage	2,000.00		
Telephone and telegrams	714.10		
Depreciation — Furniture and fixtures	428.55		
Bad debts	2,422.02		
Insurance	120.30		
Taxes	30,000.00		
Sundry unclassified expenses	426.00		
	$62,810.97		
Total expenses			$124
Net profit			$114

turing and Profit-and-Loss Statement

arison With the Year Ended December 31, 1920

Per Cent.			1920	Per Cent.	Percentage Increase	Percentage Decrease
			$565,916.40			
36.255		$205,178.65		36.256		.001
19.080		113,183.28		20.000		.920
8.174		46,971.06		8.300		.126
63.509			365,332.99	64.556		1.047
36.491			200,583.41	35.444	1.047	
9.361		$ 55,662.61		9.836		.475
.458	$ 3,000.00			.530		.072
1.145	7,500.00			1.325		.180
.840	5,500.00			.972		.132
.954	5,000.00			.884	.070	
1.122	6,338.26			1.120	.002	
1.553	8,120.50			1.435	.118	
.389	2,010.20			.355	.034	
.229	1,250.10			.221	.008	
.148	900.50			.159		.011
2.367	15,250.00			2.695		.328
.049	286.20			.051		.002
.012	81.60			.014		.002
.095	425.25			.075	.020	
9.361	$55,662.61			9.836	.252	.727
9.589		$ 50,722.50		8.963	.626	
.687	4,500.00			.795		.108
1.634	10,700.00			1.891		.257
1.298	8,500.00			1.502		.204
.458	2,124.00			.375	.083	
.305	1,560.50			.276	.029	
.109	614.10			.109		
.065	352.60			.062	.003	
.370	1,840.20			.325	.045	
.018	115.10			.020		.002
4.580	20,000.00			3.534	1.046	
.065	416.00			.074		.009
9.589	$50,722.50			8.963	1.206	.580
18.950			$106,385.11	18.799		.151
17.541			$ 94,198.30	16.645	.896	
100.000				100.000		

it is to ascertain the profits or losses from the business as a whole. It is even more important, because, the actual condition of the business cannot be properly judged from the total of results. One product or commodity may contribute satisfactory profits, the profits from another may be unsatisfactory, and a loss may result from another. If the total net

PROFIT AND LOSS SHOWN BY THE BOOKS

Sales	$250,816.20	
Less returns	5,210.60	
Sales, Net		$245,605.60
Cost of Sales:		
Merchandise inventory Dec. 31, 1920	$ 80,110.30	
Purchases, Net	140,620.80	
	$220,731.10	
Deduct Inventory Dec. 31, 1921	116,210.80	
Cost of sales		104,520.30
Gross profit		$141,085.30
Expenses:		
Rent	$ 5,500.00	
Light, heat, elevator power	2,190.80	
Delivery expenses	12,619.12	
Salaries	36,410.20	
Commissions	13,540.60	
Discounts on sales	5,100.00	
Bad debts	1,500.00	
Repairs, furniture, and fixtures	210.40	
Depreciation, furniture and fixtures	2,018.00	
Packing	15,740.22	
Advertising	12,410.60	
Stationery and printing	1,204.80	
Traveling expenses	3,620.04	
Postage	1,240.08	
Telephone and telegrams	510.60	
Insurance	315.40	
Taxes	615.00	
Sundry expenses	218.64	
Total expenses		114,964.50
Net profit		$ 26,120.80

FIG. 20

result is apparently satisfactory, the fact of an actual loss resulting from one of the products, or commodities, may be unknown, or even unsuspected.

38. Example of Detailed Statements.—The most important function of account keeping is to explain how profits and losses have occurred, not merely in connection with an

entire business, but also with respect to each important contributory. A concrete example, illustrating the importance of the subject, is presented from the following details assumed for the purpose:

The accounts of a merchant's business have been closed, the profits for the fiscal year being stated as $26,120.80. The business consists of buying and marketing five commodities. The total profit appears to be satisfactory, but the merchant wishes to know the profit derived from each of the five commodities. An investigation is made, the details being as given in the profit-and-loss statement shown in Fig. 20. The object in view—ascertaining the profit from each one of the five commodities—requires an analysis of the profits shown by the books. Such an analysis is given in Figs. 21, 22, and 23.

Analysis of Sales and Returns

	No. 1	No. 2	No. 3	No. 4	No. 5	Total
Sales	$75,980.60	$50,410.20	$20,360.40	$52,190.10	$51,874.90	$250,816.20
Returns	2,650.20	1,210.60	214.10	635.70	500.00	5,210.60
Net sales	$73,330.40	$49,199.60	$20,146.30	$51,554.40	$51,374.90	$245,605.60
Percentages to total net sales	29.86	20.03	8.20	20.99	20.92	100

Fig. 21

Analysis—Cost of Sales and Gross Profit

	Inventory 12–31–20	Purchases	Total	Inventory 12–31–21	Cost of Sales	Gross Profit
No. 1	$30,520.60	$ 50,960.20	$ 81,480.80	$ 35,910.00	$ 45,570.80	$ 27,759.60
No. 2	10,160.20	38,210.80	48,371.00	30,500.00	17,871.00	31,328.60
No. 3	5,210.90	15,146.40	20,357.30	12,150.50	8,206.80	11,939.50
No. 4	16,122.22	16,303.40	32,425.62	25,270.20	7,155.42	44,398.98
No. 5	18,096.38	20,000.00	38,096.38	12,380.10	25,716.28	25,658.62
	$80,110.30	$140,620.80	$220,731.10	$116,210.80	$104,520.30	$141,085.30

Fig. 22

39. Direct Expenses.—The analysis of expenses is assumed to show the closest possible approximation to actual costs. The charges directly proportioned to each commodity would, of course, be based on the particular conditions that existed.

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Analysis of Expenses

	No. 1		No. 2		No. 3		No. 4		No. 5		Indirect Expenses	Total
	Amount	Per Cent.	Amount	Per Cent.	Amount	Per Cent.	Amount	Per Cent.	Amount	Per Cent.		
Rent	$ 1,500.00	2.0455	$ 900.00	1.8293	$ 300.00	1.4891	$ 800.00	1.5517	$ 750.00	1.4598	$ 1,250.00	$ 5,500.00
Light, heat, power, elevator	600.00	.8182	350.00	.7114	150.00	.7445	325.00	.6304	320.00	.6229	445.80	2,190.80
Delivery expenses											12,619.12	12,619.12
Salaries	9,150.00	12.4778	7,820.20	15.8948	2,160.00	10.7217	5,780.00	11.2115	6,000.00	11.6789	5,500.00	36,410.20
Commissions	4,520.60	6.1647	2,580.00	5.2439	520.00	2.5811	3,110.00	6.0325	2,810.00	5.4696		13,540.60
Discount on sales	2,799.91	3.8182	982.29	1.9980			773.31	1.5000	543.79	1.0585		5,100.00
Bad debts											1,500.00	1,500.00
Repairs—Furniture and fixtures	45.00	.0614	26.00	.0528	10.50	.0521	58.50	.1134	50.00	.0973	20.40	210.40
Depreciation—Furniture and fixtures	750.00	1.0228	420.00	.8537	50.00	.2482	498.00	.9660	300.00	.5839		2,018.00
Packing	7,048.13	9.6115	2,959.98	6.0163	604.39	3.0000	2,577.72	5.0000	2,550.00	4.9635		15,740.22
Advertising	6,000.00	8.1821	3,000.00	6.0976	200.00	.9927	2,500.00	4.8492	710.60	1.3832		12,410.60
Stationery and printing											1,204.80	1,204.80
Traveling expenses	1,200.00	1.6364	750.00	1.5244	100.00	.4964	620.04	1.2027	700.00	1.3625	250.00	3,620.04
Postage											1,240.08	1,240.08
Telephone and telegrams											510.60	510.60
Insurance											315.40	315.40
Taxes											615.00	615.00
Sundry expenses.											218.64	218.64
Totals	$33,613.64		$19,789.17		$4,094.89		$17,042.57		$14,734.39		$25,689.84	$114,964.50
Percentages to net sales		45.8386		40.2222		20.3258		33.0574		28.6801		

Fig. 23

Rent would be based on a fair valuation of the proportion of total rent, assessable to each commodity according to space occupied and advantages of location.

Light, heat, and power consumed could be approximated on the basis of number and power of lights used, area to be heated, and relative use of the elevator.

Salaries would be definitely assignable to particular commodities, in cases where the salaried employe devoted exclusive service to a commodity. In cases where exclusive service was not given to a single commodity, an apportionment based on the particular conditions could be made,

Commissions could be accurately ascertained from an examination of salesmen's commission accounts.

Discount on sales is ordinarily treated as a financial expense, and requires consideration as a cost, when rates of discount for cash or short-term payments vary for different commodities.

Distribution of Indirect Expenses

	No. 1	No. 2	No. 3	No. 4	No. 5	Total
Percentage of net sales	3.123	2.095	.858	2.195	2.188	10.459
Distribution of expenses	$7,670.99	$5,145.67	$2,106.57	$5,392.30	$5,374.31	$25,689.84

Fig. 24

In order that each commodity may be placed on an equal footing in arriving at net profit, it is advisable to treat the varying cash discounts as reductions of selling prices.

Repairs and depreciation of furniture and fixtures chargeable to each commodity are ascertainable with a reasonable degree of accuracy, if the inventory of furniture and fixtures is distributed on the basis of use by each commodity.

Packing.—The division of packing expense depends on particular circumstances. One commodity may, unit for unit, require less material—quantity and value—and less labor than another. Discussion of the subject with the head of the packing room would probably lead to a fair division of the expense.

Advertising may be fairly divided, on the basis of prominence given to each commodity, in advertising matter.

Traveling expenses may be fairly proportioned by the travelers.

SUMMARY OF GROSS AND NET PROFIT

	Total		No. 1		No. 2		No. 3		No. 4		No. 5	
	Amount	Per Cent.	Amount	Per Cent.	Amount	Per Cent.	Amount	Per Cent.	Amount	Per Cent.	Amount	Per Cent.
Gross profit	$141,085.30	57.444	$27,759.60	11.303	$31,328.60	12.756	$11,939.50	4.861	$44,398.98	18.077	$25,658.62	10.447
Expenses												
Direct	89,274.66	36.348	33,613.64	13.686	19,789.17	8.057	4,094.89	1.667	17,042.57	6.939	14,734.39	5.999
Indirect	25,689.84	10.459	7,670.99	3.123	5,145.67	2.095	2,106.57	.858	5,392.30	2.195	5,374.31	2.188
Total expenses	$114,964.50	46.807	$41,284.63	16.809	$24,934.84	10.152	$ 6,201.46	2.525	$22,434.87	9.134	$20,108.70	8.187
Net profit	$ 26,120.80	10.637	*$13,525.03*	*5.506*	$ 6,393.76	2.604	$ 5,738.04	2.336	$21,964.11	8.943	$5,549.92	2.260

FIG. 25

40. Indirect Expenses. The expenses entered on the analysis under the caption Indirect Expenses, are of a general nature, and would probably be arbitrarily distributed to the five commodities on the basis of net sales, as shown in Fig. 24.

The statement of gross and net profits may be summarized, as in Fig. 25.

The reconstructed accounts develop the fact that the net profit ($26,120.80) covered a loss of $13,525.03 on commodity No. 1. It is also shown that commodity No. 4 is the most profitable, and that the rate of profit from commodities No. 2, No. 3, and No. 5 is approximately the same.

41. Classification for Ascertaining Profits.—Although the reconstructed accounts are based upon assumed details, they are typical of actual occurrences. It is, of course, conceded to be impracticable, in many cases, to adopt account-keeping methods sufficiently detailed for the purpose of

accurately ascertaining profits from each of several commodities dealt with in a mercantile business.

In all cases, however, it is both possible, and desirable, to account separately for the profits as nearly as may be possible, without burdening the business with an undue amount of clerical detail. The prime requisite is to employ distinct classifications for each commodity, or groups of small related commodities. When this is done, the classifications will be accounted for in respect of the following:

(*a*) Purchases
(*b*) Purchases returned
(*c*) Sales
(*d*) Sales returned
(*e*) Discount on sales. If the rates for similar periods vary as between one commodity and another, such variations, for comparative purposes, are virtually deductions from the selling price.
(*f*) Direct expenses. The reliability of results will be in direct proportion to the care with which direct expenses are directly applied, leaving for distribution only such expenses as may be general to the business as a whole.
(*g*) Inventories.

It is always possible to employ a fairly approximate basis for equitably distributing expenses of a general character. The best basis is determinable from a study of existing conditions.

CAPITAL AND REVENUE

42. Definitions.—The outlay of a business is divided between capital and revenue; in other words, each item of outlay is a charge either to permanent assets, as plant and equipment, or to profit and loss. Capital, in the broader sense, has reference to the tools with which one earns an income, as cash, land, buildings, machinery, equipment, etc. Revenue, in contradistinction to capital, means the income or profit derived from business dealings, as the income from the sale of goods, income from investments, etc. Outlays for the purchase or extension of plant and equipment are termed *capital charges*, because they increase the capital assets. Income derived from the sale of anything previously capitalized, as property or plant, is known as *capital income*. Similarly, outlays for running expenses, purchase of goods, repairs and maintenance of plant are known as *revenue charges;* and income derived from the sale of goods, from interest and dividends, etc., as *revenue income*. Money received from the sale of bonds or mortgages is termed *capital income*, and when paid for their redemption, *capital outlay*. Capital items are those affecting assets and liabilities, and revenue items are those affecting profits and losses.

43. The proper distinction between capital and revenue charges is important, and as it is difficult at times to draw the line, many errors of principle are made, either intentionally or inadvertently. Revenue expenditures should never be capitalized, because that both inflates the value of the property and produces fictitious profits. The overvaluation of an inventory will obviously produce a corresponding increase in profits, but unless this method of overstating is continued from year to year it is evident that a slump must come sooner or later. This will happen as soon as the inventory is again correctly valued, during which year the profits will be correspondingly

lower than they would have been had the preceding inventory not been overstated. The folly of such a plan is obvious, though it is often adopted during years of business depression in which the directors find it difficult to present a good statement. Under such conditions the temptation to inventory everything at a high valuation is hard to resist. Even repairs to plant and other maintenance expenses are frequently capitalized, but this should not be done; they are a charge against revenue.

44. Distinction Between Capital and Revenue.—It is difficult at times to distinguish between capital and revenue, or even to decide on an equitable distribution. This has particular significance when applied to such items as construction, replacements, repairs, maintenance, and improvements. In any case, a conservative attitude should be maintained, and if an error in judgment occurs it should be on the side of safety. The following suggestions are given as an aid in properly interpreting capital and revenue charges:

Charge to capital: (1) anything that is to exist as an asset at the end of the year; (2) outlay for permanent increase in property values; (3) outlay to increase the plant capacity or production; (4) outlay that belongs to a subsequent period, or that should be spread over a term of years; and (5) outlay for additions or permanent improvements.

Charge to revenue: (1) anything that belongs to and is consumed during the current fiscal period; (2) depreciation and extinguishment charges of plant and equipment; and (3) current operating expenses.

45. Paying Dividend Out of Capital.—The necessity for distinguishing between capital and revenue (or principal and income) is apparent in cases where dividends are paid out of capital. In other words, fictitious profits are usually shown for the purpose of creating dividends, without any thought of the results or of the fact that state laws usually prohibit such practice. This is brought about by failing to provide adequate depreciation allowances, by overstating inventories, by omission of liabilities that should be included, by capitalizing

revenue charges, etc. If the capital or principal is to be maintained intact, it is unwise for any board of directors to declare dividends before setting aside a sufficient amount for reserves and a fair amount to the surplus account. There is no doubt that this basic principle is frequently violated. Of course, if no one raises any objection, and if it comes out all right in the end, there may be no harm done; yet the desire for high dividends should not be encouraged by stockholders to the extent of crippling the company's financial standing. The owners gain nothing by milking the treasury dry for the payment of dividends when they know very well that future prospects are jeopardized by such payment. Even if the assets are increased for the purpose of creating fictitious profits, it is apparent that this does not provide the necessary cash for dividend purposes. In that event, current funds required for business needs must be used, thereby retarding future business operations; in lieu of this, money must be either borrowed or appropriated from some other fund if such a fund exists. This is not good practice, however, because in any case the money must be repaid to the agency from which it was borrowed.

46. Examples of Capital Outlay.—In a going business, the following items may be considered a charge against capital, but it is apparent that all or most of them should be gradually written off against revenue. These are indicative of many others that could be included: Purchase of plant and equipment, including freight and inbound charges; additions to plant and equipment; improvements and betterments; cost of construction; good-will of a going concern; patents, trade-marks, and patterns; incorporation expenses, to be spread over a few years; interest on bonds, during course of construction; dividends on capital invested, during construction; discount on bonds issued, to be spread over a term of years; furniture and fixtures; office, plant, and delivery equipment; development costs, as uncovering a quarry or a mine; and street grading or improvements for a railway company.

47. Examples of Revenue Outlay.—The following list includes a few of the items that may be charged to revenue; it could be extended considerably: Merchandise purchases; operating expenses; selling and delivery expenses; office and administrative expenses; factory labor and salaries; repairs and replacements; maintenance and up-keep; and interest and discount.

48. Distribution of Doubtful Items.—There are many items of a doubtful nature that must be set aside for either capital or revenue, or for both in proper proportions. A few of them are as follows: Interest on bonds and discount on bonds issued, which items are permitted by the Interstate Commerce Commission only for the period during construction, after which they become a charge against revenue; dividends on capital invested during construction, sometimes capitalized; experimental department costs, sometimes capitalized; improvements that may or may not increase the efficiency of the property; the net loss in the business under construction, as a fish hatchery; replacements of worn-out or spoiled machines; remodeling of stores and buildings; and replacement cost, as of a damaged bridge or property destroyed by fire.

There are, of course, many book entries that do not affect either capital or revenue. These include canceling entries, payments on account, payment of notes, etc. It will be seen that these constitute the substitution of one current asset for another or the settlement of a current liability.

OPERATING ON THE NEW YORK STOCK EXCHANGE

DETAILS OF BUYING AND SELLING

EARLY HISTORY OF EXCHANGE SYSTEMS

1. Introduction.—In order to obtain a clear idea of the why and the wherefore of the organization known as the New York Stock Exchange, it is necessary to go back in history and trace the evolution of the exchange.

2. Beginnings of the English Stock Exchanges. One of the earliest records of a stock exchange as such, dates back to about the year 1600, when the East India Company was incorporated, and later, the Hudson's Bay Company. These companies were stock companies and their shares were traded in about the latter part of the 17th century. At this time, the stock market may be said to have been unorganized, and in the year 1697 the English Parliament promulgated a law checking the evils arising from speculation in the securities of the large number of stock companies then existing. This same law also provided for the licensing of the stock brokers.

3. Beginnings of the French Stock Market.—At about the same time that stock trading developed in England, a stock market began to function in Quincompoix Street in Paris. Here, as in England, active trading took place.

4. Earliest Panic.—Growing out of these early operations, a period of feverish speculation resulted, and in 1720 the

collapse of the South Sea Company, in England, and the Mississippi Company, in France, caused the first great panic known to the stock market.

5. Formation of the London Stock Exchange.—On July 5, 1773, the London Stock Exchange was founded. This organization may be said to have grown out of the operations of the *curb brokers*—that is, brokers who met on the curbstone—in Change Alley in London.

6. Beginnings of the Stock Market in New York. Along about the year 1800 a period of stock buying and selling began in New York. In this market the first issue of United States Government bonds, along with the shares of the United States Bank and the Bank of North America, were actively dealt in.

The usual meeting place of the brokers operating in this market was near an old buttonwood tree in Wall Street, and the stock market has continued in Wall Street or near by even to this day, so that the New York stock market and "Wall Street," or "the street," have come to be almost synonymous terms.

In May of 1792 an agreement was entered into by a number of brokers whereby it was agreed that a commission of $\frac{1}{4}$ per cent. of the specie value of the securities bought or sold should be charged. This date may be regarded as the beginning of the Stock Exchange in this country.

7. Foundation of the New York Stock Exchange. In the year 1817, the same organization of stock brokers founded in 1792 was organized into a body then known as the New York Stock Exchange Board, and in 1827 this organization moved into the Merchants Exchange building.

In 1869 this Board and the Open Board of Brokers consolidated, forming the New York Stock Exchange as it appears today with its 1,100 members.

8. Government of the New York Stock Exchange. The New York Stock Exchange is governed by the Governing Committee, made up of the President and the Treasurer, who

are elected annually, and forty other members of the Exchange, who are elected for terms of 4 years, and classified so that ten are elected each year. Any decision by this committee is final. The forty members of this committee are so assigned that certain of them serve also on the subcommittees of the Exchange, such as the committees on arrangement, arbitration, admissions, finance, commissions, law, constitution, stock list, clearing house, and securities.

9. Membership.—A membership on the Exchange is called a *seat*. This term relates to the time when each broker had an individual seat in the Board Room, but now, owing to the high-pressure business carried on, the seats have been abolished.

The number of seats on the Exchange is limited to 1,100, and each member must be elected to membership by the body before he may have a seat transferred to him through purchasing another's privilege. As a member of the Exchange, a broker is answerable to certain laws, and under certain conditions may be expelled.

10. Value of Seats.—A seat on the Exchange is an asset of value; its price varies, often going as high as $96,000, as in 1909. To own a seat, a man must not only have money, but he must be of good business reputation and have no associations that would bring discredit upon the Exchange.

11. Expulsion.—If found guilty of fraud, any member may be expelled by a two-thirds vote.

Any member may also be expelled if he should be in any way connected with any organization in New York dealing in securities similar to those listed on the New York Stock Exchange.

12. Representation.—A member may represent only one firm on the floor of the Exchange. Any member in New York must have a place of business there where notices may be sent and received.

LISTING OF SECURITIES

13. Since the transactions on the Exchange consist of the buying and selling of securities, which may be either stocks or bonds, explanation will here be given as to how each security is admitted for trading on the Exchange, since only securities that have been listed on the *stock list* are dealt in on the Exchange.

14. Requirements for Listing.—Before securities can be listed on the stock list of the Stock Exchange, they must be examined by the Committee on Stock List.

In order to have the Committee on Stock List consider a stock for listing, the promoter must furnish this committee with certain data. Were it a railroad, the following data would be required:

1. Location of the property.
2. Description of the property.
3. A map of the property.
4. Name of the company.
5. Date of organization and by what authority.
6. Route.
7. Portion of the road completed and in operation.
8. Proposed extension.
9. Equipment.
10. Liabilities and assets statement.
11. Earnings.
12. Statement of indebtedness.
13. Number of shares of capital stock issued and the par value.
14. A list of officers and directors.
15. Location of the office of the company.
16. Location of a transfer office and registrar in New York City.

In every case the data required by the committee contain all the necessary details regarding the security that it is desired to have listed.

To sum the matter up, the corporation whose securities are about to be listed is rigidly examined by the Committee on Stock List before its securities and their listing will be considered by the Governing Committee. This latter committee makes its investigation from the data provided as to capital, resources, liabilities, number of shares outstanding, etc. This committee and the previous committee having both passed favorably upon the security, the security is then listed for trading on the Exchange.

15. Value of Listing.—Since a security is subject to such careful scrutiny by the Stock Exchange through its designated committees, listing should add a feeling of faith and security regarding its value.

16. Special Rights of Committee on Stock List. Under the ruling of the Exchange, the Committee on Stock List may place on the list any national, state, or city government's bonds, without the consenting action of the Governing Committee.

17. Listed and Unlisted Securities.—Previous to 1910 there were two kinds of securities dealt in on the Exchange, namely, listed and unlisted. The listed securities have just been explained, so it is only necessary to state that the unlisted securities were those not having been passed on and scrutinized by the Committee on Stock List and the Governing Committee. At the present time the unlisted-securities department on the Exchange has been abolished.

18. Clearing House and Ex-Clearing House Stocks.—According to the custom in the "street," sooner or later a stock listed on the Exchange may be what is called an *active stock* and the buying or selling of it becomes voluminous. When this condition becomes true, it will be referred to the Committee on Stock List, and if they so decide it will become a *Clearing House stock,* and all trades in that security would be *cleared* through the operation of the Clearing House for the New York Stock Exchange. Stocks not so listed are known as *Ex-Clearing House stocks.*

OPERATORS ON THE EXCHANGE

19. Classes of Members.—The 1,100 members in the Exchange are divided into the following groups:

Principals: A principal is a member of the Exchange who does no buying or selling for himself, but one who employs another broker to buy and sell for him.

Two-Dollar Brokers: These are brokers who operate as brokers for brokers and charge a commission of $2 per 100 shares of stock for every 100 shares bought or sold by them. For example, suppose that Broker A buys 100 shares of stock for Broker B; then, Broker A would charge Broker B $2 commission for having executed his order for him.

Room Traders: These are men who are present on the floor of the Exchange, and buy or sell securities for their own account. They are professional speculators, who, being always present on the floor, are able to take every advantage of an opening to buy and sell securities and take a profit.

Specialists: Specialists are men who make a specialty of buying and selling two or three securities, which are usually securities of an investment class, and their business is to a large extent with other brokers.

20. Commissions Charged.—When a broker buys or sells stock for a customer he is allowed a commission of

(*a*) $7.50 per 100 shares on stock with a par value up to $10;

(*b*) $15.00 per 100 shares on stock with a par value from $10 to $125;

(*c*) $20.00 per 100 shares on stock with a par value of $125 or over;

(*d*) A minimum commission of $1.00 on all transactions.

However, should the customer be a member of the Exchange, and a principal, then the broker would collect $\frac{1}{50}$ per cent. if the name of the principal were given; were it not given, then the broker would charge $\frac{1}{32}$ per cent. of the market price.

Any violations of the commission law are punishable by suspension for from 1 to 5 years; for the second offense the penalty is expulsion.

TRADING ON THE EXCHANGE

21. Opening.—On every business day the Exchange is opened at 9:30 A. M., and at 10:00 A. M. sharp the chairman announces the opening of the market; buying and selling then begin. The Exchange remains open until 3:00 P. M. on every business day except Saturday, when it closes at 12:00 o'clock noon. Thus it is seen that 5 hours are provided for the active buying and selling of securities. Should a broker do business with another, either in the Exchange or publicly outside, before 10:00 A. M. or after 3:00 P. M., a fine of $50 is levied.

Naturally, when the market is just opened by the chairman there is great noise and hubbub and the babbling of voices to be heard; brokers are running here and there attempting to execute the orders which have accumulated overnight. As one stands in the gallery and watches this activity every little while he will see a man emerge from the crowd around a post and make a note on a small pad, and if the spectator should be curious and ask the meaning of the procedure he would be informed that the man was noting the data of a transaction just closed.

22. Manner of Trading.—In rows, all about the large room where the buying and selling is carried on, there are posts erected, and on these posts are recorded the names of securities that can be bought or sold at that place. So it is seen that each stock has its own place on the floor, where buying or selling takes place.

Therefore, should a broker have an order to buy 100 shares of United States steel at the market price, he would go to the U. S. Steel post, and cry out how much stock he wanted to buy, and the price he wanted to pay. The other brokers round about make their offerings, say one at the price of 105½, another at 105¼, and so on, and the trade would be arranged. There are no written contracts exchanged. All that is necessary to close a transaction is a simple word "taken" or "sold." Whenever a broker makes a sale or a purchase he merely makes an entry on a small pad, showing the name of the broker

to whom he sold or from whom he bought the security, along with the price paid and kind of stock, together with the character of the bid or offer. An example is given in Fig. 1. The data as there recorded means, Bought, 900 shares of U. S. Steel at $149\frac{1}{8}$ a share, from H. I. Smith and Co., and the broker's initials are signed to show who executed the order.

23. Character of Bids and Offers.—Under the laws of the New York Stock Exchange, bids and offers may be made on the following terms:

(*a*) *For Cash:* The security to be delivered on the day of sale and payment made for it.

(*b*) *Regular Way:* The security to be delivered on the next business day and payment received therefor.

(*c*) *At 3 Days:* The security to be delivered on the third day after making the contract.

(*d*) *Buyer's or Seller's Options:* Security to be deliverable not sooner than the fourth day after the contract, nor later

B/900 U. S. Steel

149⅛

H. I. SMITH & CO.

W. A. F.

FIG. 1

than 60 days. On these transactions written contracts are exchanged, which draw interest at an agreed rate from the date of the contract till the date of delivery of the security. Some do not carry interest, and are known as being "flat."

Under these Buyer's or Seller's Options, the seller has the right to make a delivery, or the buyer has a right to demand delivery at any time within the stipulated time by giving one day's notice.

24. Fictitious Sales.—Under the rules of the Exchange, a broker who takes part in a fictitious sale on the floor of the Exchange is punishable by suspension for a period of time up to one year. Thus, should a broker make a fictitious sale to another broker, the parties so engaged are punishable. The Exchange rules that all sales shall be *bona fide;* that is, in good faith.

25. Telephoning Orders From the Office to Exchange.—Every firm having a membership on the Exchange has a telephone booth on the floor of the Exchange, these booths being located at one side of the floor.

Orders for purchase or sale of securities are telephoned from the broker's office to the firm's booth, where they are received by a clerk in the firm's employ and conveyed to the *floor broker* of that firm, who executes them. When an order has been executed, the floor broker gives the details to the telephone clerk, who then telephones the result to the broker's office.

26. Short Sales.—A *short sale* on the Exchange is a sale in which the broker's customer, or person selling, sells something of value which he does not own. For example, suppose the customer does not own 100 shares of United States Steel, but gives his order to the broker to sell 100 U. S. Steel; that would be a short sale by the customer, to the extent of 100 shares of U. S. Steel.

The question now is, Where does the broker get the security to make a delivery for the seller?

The answer is, he borrows that 100 shares of stock from some other broker. When the seller's broker borrows the stock he immediately gives the other broker a check for its full market value, and the broker lending the stock pays to the seller's broker interest on the amount of the check at an agreed rate. The reason that the broker who is lending the stock pays interest on the money paid him by the borrowing broker, is that the lending broker has the use of increased capital, just as if he had borrowed it at the bank; therefore he pays interest for its use. In the long run, the transaction is resolved

down to a loan of capital by one broker to another on collateral, and the rule for interest applies. The term *collateral* means stocks or bonds deposited as security for loans. Securities so deposited are said to be *hypothecated*.

It is readily seen that by lending stock in the street to another broker, a broker may obtain the use of more capital than if he had made a loan at the bank and deposited his stock as collateral, for in the case of loans to other brokers he obtains the full market value, whereas at the bank he obtains not more than 80 per cent. of its market value.

Another advantage is that when a broker loans stock to another broker, he can demand its return at any time after one day's notice, whereas at the bank he would have to make a substitution in his collateral or else repay his loan to the bank.

Because of these facts, there are many lenders of stock, for by so lending they are able to obtain the use of capital to the full market value of the security, and at a lower rate of interest than at the bank.

27. Reason for Short Sales.—An operator will sell short when he believes that the market price of a security is too high and that a decline in price is due. He does this with the hope that by the time when he must make delivery or return it to the lending broker he may be able to buy in the security at a lower price than that for which it was sold; if his judgment is correct he will make a profit.

Because selling short indicates a belief on the part of the seller that the price will decline, operators often sell short to influence the market and thus bring about a decline by which they may profit.

28. Handling of Stock Loans.—Since the lending of stock includes the delivery of a stock certificate by the lending broker to the borrowing broker, and the payment of cash by the borrowing broker to the lending broker, it is readily seen that this operation has all the elements of a sale. So, under the rules of the Exchange, *stock loans* are treated as sales; the

necessary comparisons and the delivery of stock and cash are made just as with any other sale.

29. Arbitrage.—Arbitrage is that operation of buying in the London stock market and selling short in the New York market or vice versa, and making a profit. By this operation a broker, through his agent in London, may buy a security at a lower price than the price of that security in the New York market. He then sells that security short in the New York market and by so doing he has taken a profit from the operation.

30. Reports of Brokers.—When a broker has executed a customer's order on the floor of the Exchange, the broker telephones the result back to his own office, giving all the data, and then by means of the Exchange tickets of the Clearing House system as operating in the "street," his office compares the data, as recorded, with that of the office of the other broker who was a party to the transaction. In this way the data are checked up and error is reduced to the minimum. This method of comparison only holds good for Clearing House stocks.

With Ex-Clearing House stocks, comparisons are made by each broker submitting a memorandum of the transaction to the other broker by means of a clerk called a *runner,* whose duty it is to carry these memoranda to the other brokers' offices, have them verified, and return them to his own office.

In every case these reports are compared by not later than 4:00 P. M.

31. Time of Delivery.—Under the rules of the Stock Exchange it is provided that if a security is sold for cash it shall be delivered before 2:15 P. M. of the same day. If sold in the "regular way" then it must be delivered by not later than 2:15 P. M. of the following day.

32. Failure to Deliver.—If a broker fails to deliver a security by 2:15 P. M. of the day due, then the buying broker may close it out "under the rule." To do this, the buying broker immediately notifies the Chairman of the Exchange, who will read the notice from the rostrum the following day, and proceed to buy that security in for the broker. Should the

price be greater than the original contract price, then the buying broker has a claim against the seller, under the original contract, for the difference. For example, should Broker A fail to deliver 100 shares of stock to Broker B, then Broker B would notify the Chairman of the Exchange, who would then proceed to announce the notice from the rostrum, and then buy in that 100 shares of stock at the best price obtainable. If it was bought in at $91 per share, and the original contract price was $90 a share, then Broker B would have a claim against Broker A for $100, which is the difference.

33. Transfers.—As every stock certificate issued by a stock company to a stockholder bears the name of that stockholder, it is necessary that when a certificate changes hands it shall be transferred from the name of the previous owner to that of the new owner on the records of the stock company issuing the stock certificate, and that a new certificate be issued to the new holder.

For this reason the usual certificate or stock has a form on the back of it which may be filled out to assign it to the new owner, and then the new owner may take the certificate to the transfer office and have it transferred to his name.

34. Collection of Dividends.—Since dividends will only be paid to the recorded holders of stock, as shown on the stock company's books, it is readily seen that some sales of securities will be made when the transfer books of the company are closed. Some of these sales will be *ex-dividend,* which means that the new purchaser does not have a claim on any dividend declared before the stock is transferred on the company's books. However, should the sale carry dividend the purchaser will receive a *due bill* from the seller for the dividend.

USE OF CREDIT IN THE STOCK MARKET

KINDS OF LOANS

35. Loans at the Bank.—The money and stock markets are interrelated in the following manner:

(*a*) To secure personal loans, Stock Exchange securities are deposited as collateral.

(*b*) To obtain working capital, bond houses and stock brokers engaged in the sale of investment securities make loans with banking institutions by depositing their unsold holdings as collateral for such loans.

(*c*) All speculative purchases of Stock Exchange securities are partly financed by time loans or demand loans arranged with banking institutions, and secured by these securities as collateral.

These statements clearly show the manner of obtaining a loan from a banking institution by securing that loan with a collateral deposit.

36. Certification.—Credit is also extended to brokers by the banks through the operation of a system of certification. Certification may be defined as that operation whereby a bank, through the signature of its cashier or paying teller on the face of the check, guarantees that the signature of the drawer of the check is correct as well as that the bank will pay the amount of the check on its presentation.

By means of *certification,* credit is extended to the broker over and above that broker's deposit in the bank. An example will be here discussed:

Suppose that Broker Jones has on deposit a balance of $75,000. Broker Jones buys securities for his customers to the amount of $400,000. It is clearly seen that the broker's available capital is insufficient to pay for the securities thus bought, so the bank, having previously investigated the broker and established his line of credit, will certify the broker's checks for the amount sufficient to pay for the securities. This certifying of a broker's check for more than his bank balance is

known as *over certification.* From this example it is clearly seen that the operation of certification is in reality a temporary loan to the broker by the bank, and upon closer examination it is readily seen that very little risk is taken in connection with the operation in connection with Stock Exchange transactions.

In order to have the resulting benefits attached to *over certification* or *temporary loans,* it is necessary for the broker to enter into a definite agreement with the bank as to the balance which the broker will maintain at the bank. For example, a broker may agree to maintain a daily balance of $75,000 at his bank, and on that balance the bank may agree to certify his checks up to the amount of, say, $1,000,000. It will be readily seen that should the bank certify the broker's check for the amount of $200,000, then the bank will be over certifying to the amount of $125,000, that is, they would make a temporary loan of that amount to the broker. From the discussion thus far, it will be plainly seen that a broker's credit is a most important factor. It may be well to state now that the broker is not expected to use the limit of his credit very often.

So far, we have seen how a *temporary loan* is made through the operation of certification. And now it is necessary to go into some detail regarding a broker's deposits at the bank in the repayment of this temporary loan.

By the agreement with the bank, the broker is required and expected to make his deposits to his account, as he receives the checks from the sale of other securities than those for which he has paid through the medium of the temporary loan from the bank. Thus, should the broker deliver securities, for which he would receive other certified checks, then under his agreement with the bank he would be expected to deposit them to his account at the bank.

When the broker has received his stock, for which he has paid through the certification of his checks at the bank, he proceeds to arrange for his loans of cash on them as explained in paragraph (*c*) of Art. **35.**

37. Morning Loans at the Bank.—It has become customary of late for some of the banks to make what are

called *morning loans* to a broker for an amount sufficient to cover the probable amount of certification necessary for that day. This custom has come about through the desire to do away with the seeming violation of the National Banking Law, which stipulates that it shall be unlawful for a national banking institution, or its representative, to certify a check for an amount in excess of the amount on deposit to the credit of the maker.

38. Loans Made in the Exchange.—As has been previously explained, there is a place in the Exchange Board Room where money loans are arranged, and each loan so arranged is secured by securities deposited as collateral.

At this place the *money brokers* arrange to lend money to the brokers who may need it. These loans are usually *call loans* and carry interest at the *call rate,* which fluctuates from day to day, sometimes higher, sometimes lower. These money brokers, who make it their business to lend money, are members of the Exchange, and among them are representatives of the banks.

39. Interest Rates on Loans.—A *time loan* is a loan that is made to extend over a specified length of time, as, for example, 30, 60, or 90 days, and carries interest at an agreed rate.

A *demand,* or *call,* loan is a loan that is made with the understanding that it is subject to call at any time, usually the following day, and that it shall carry interest at an agreed rate.

The interest rates on demand loans vary from as low a rate as 2 per cent. to as high as (on July 9, 1919) 17 per cent. for capital loaned on industrial stocks and 15 per cent. for capital loaned on mixed collateral.

COLLATERAL FOR LOANS

40. Requirements.—As has been stated, when a loan is made to a broker, that broker deposits collateral, which may be made up of stocks and bonds, or stocks or bonds alone. When the collateral is deposited, the bank examines it carefully to find

out if each security deposited is readily salable, and if each has a constant market. To a large extent, the most desirable securities for this purpose are government bonds or stock and bonds of railroad companies, which are listed as of high standing on the exchange. Very often a bank will refuse to make a loan that is secured only by industrial stocks as collateral unless an increased rate of interest be charged, and more often they require a certain amount of railroad securities to be included in the collateral.

When government bonds are deposited as collateral, banks will loan to the market value of the bonds, whereas with loans that have other collateral the bank will loan only about 80 per cent. of the market value of such collateral, thus giving the bank a margin of 20 per cent. on mixed collateral, and 25 per cent. is required on industrial collateral.

Naturally, should the market value of the collateral decline, then the bank will issue a call for more collateral to maintain the required margin.

41. Substitutions.—To make a substitution in collateral for a loan means to withdraw one security and in its place substitute another block of securities of equal value or more.

Thus, if a broker deposits as collateral for a loan 100 shares of Mexican Petroleum at 60 and 300 shares of Erie at 40 and later finds that he needs the 300 shares of Erie to make a delivery, he would arrange with the bank to withdraw the 300 shares of Erie and substitute in its place, say, 200 shares of New Haven at 62. Thus it is seen that the margin on the loan at the bank remains practically the same as before.

42. Legality of Hypothecation of Customer's Securities.—No doubt the reader is wondering whether it is lawful for a broker to hypothecate the securities of a customer when they are held on margin.

As has been seen, the customer only has an equity in the securities held for his account to the amount of his credit balance as shown by his account. Therefore, if the broker still retains securities for that customer in his office to the extent of that customer's equity, then the broker is within the law.

This is the plan followed in the street by many firms operating as brokers.

On the other hand many firms have an agreement with their customers to the effect that the securities held for any customer may be used as collateral for a loan at the bank or elsewhere.

CLASSES OF STOCK

43. Grouping.—The stocks of corporations may be said to be in either one of the classes enumerated below.

(*a*) *Railroads:* Stocks of railroad corporations.

(*b*) *Mining:* Stocks of mining corporations.

(*c*) *Industrials:* Stocks of industrial corporations.

44. Stock Certificates.—Certificates of stock are pieces of tough paper on which is engraved the name of the corporation, kind of stock, and number of shares the certificate represents, and they are signed by the president and the treasurer of the corporation. It is specified on each certificate that the person whose name appears on its face is the owner of that certificate; also that the shares are transferable only on the books of the corporation. On the back is a printed blank form for indorsement to a new owner, in the case of a sale, giving the new owner power of attorney for the transfer of the stock to his name.

45. Kinds of Stocks.—In the organization of a corporation, stock may be issued under the name of *preferred stock* and *common stock,* and each has the following rights.

Preferred stock is stock that bears a fixed rate of dividend, which must be paid before any dividend is payable on the common stock. The dividend may be *cumulative* or *non-cumulative.* Should it be cumulative, then whatever dividend is not paid this year must be paid out of future profits before the common-stock holders will have any claim for dividend. At all times this guaranteed dividend will be accumulating till paid. From this it will be seen that the preferred stock is the investment stock held for revenue from dividends, while the *common stock* is the speculative stock.

46. Bonds.—There are many forms of bonds issued, but in every case a bond represents a lien, or mortgage, on some part or all the property of the company that issues the bonds. Some of these bonds are known as *consolidated bonds,* which are bonds issued, after a reorganization, in place of previous bond issues. When a consolidated-bond issue is made it consolidates the previous bond issues under one bond issue, which covers all previous ones.

There may be *convertible bonds* issued, and they usually are bonds which are convertible into stock.

Then again, should one corporation buy control of another, a series of bonds might be issued, called *collateral bonds.* In this case they would be secured by the bonds of that corporation controlled.

Further, should a corporation issue bonds and record the names of the holders of them, then these bonds would be known as *registered bonds.*

Another form of bond is called a *coupon bond.* This is a bond with coupons attached on which the interest due at certain dates is stated, and, as these coupons come due, interest is collected by clipping off the coupon due and presenting it for collection. A good example is the Liberty coupon bond.

In every case it is to be remembered that a bond constitutes a mortgage, or lien.

WALL STREET'S INSTRUMENTS

47. The Ticker.—On entering a broker's office, practically the first thing to be noticed is the *ticker* as it is called. This is an instrument that automatically prints on a *tape* (a

FIG. 2

long roll of paper about $\frac{5}{8}$ inch wide) the prices at which blocks of securities were sold on the Exchange.

The data regarding the sales on the Exchange are gathered by reporters for the New York Quotation Company, who

report this information to their office, and it is then sent out over the wires to the places where these tickers, or stock indicators, are set up, and the machine automatically prints the data in the form shown in Fig. 2. The data as there printed, read from left to right, mean:

100 Crucible Steel was sold at a price of $136 per share;

2 shares Studebaker was sold at $$113\frac{1}{4}$ per share;

100 Bethlehem Steel "B" was sold at $$102\frac{7}{8}$ and 8 shares at $103;

100 Central Leather was sold at $$110\frac{3}{4}$ per share;

100 Smelters was sold at $87 per share.

It should be understood that every stock listed on the Exchange has an abbreviation, and for the purpose of illustration a few of them are here given.

Abbreviation	Name of Stock
A. K.	Alaska Gold Mines
A. R.	American Smelting and Refining Co., or "Smelters"
B. S. B.	Bethlehem Steel, Series "B"
Anc.	Anaconda Copper
B. R. T.	Brooklyn Rapid Transit
Mnp.	Mexican Petroleum
Aco.	American Cotton Oil
Rbc.	Republic Steel
Pa.	Pennsylvania R. R.

Pr. means preferred stock; X means ex-dividend; U. R. means under the rule.

48. Clearing House Price as Shown on the Ticker. Every day, just as soon as the last sale is recorded, the *Clearing House prices* are made up and sent out over the tape to the offices of the brokers. That price is the nearest whole number to the last sale price. For example, should Anaconda Copper's latest sale price be $79\frac{3}{4}$, then the Clearing House price would be 80, because $79\frac{3}{4}$ is nearest the whole number 80, so that price of 80 stands as the Clearing House price.

However, the official Clearing House prices are compiled by a clerk who goes from the Clearing House to the board room

and compiles them. He then checks his prices as made up with those as appearing on the ticker tape. Should a difference in the prices be noted, then the brokers are notified of the error appearing on the tape. A further discussion of the use of the Clearing House prices will be given later.

49. Telephones.—Next to the ticker, the most important instrument used in relation to the operation of the New York Stock Exchange is the telephone. As has been explained, the telephone is used in transmitting the orders of the customers to buy or sell, from the office to the Exchange, and then, when that order has been executed, the data of that transaction are returned to the broker's office. When one considers that in one day alone the transactions on the Exchange may run as high as 2,000,000 shares or over, it is readily seen that without the telephone the Wall Street system would be badly slowed up.

50. Telegraph and Cable Systems.—The telegraph and cable systems are of use in conducting out-of-town business on other exchanges.

51. News Slips.—In Wall Street there are two news agencies, one of which is Dow, Jones Co., and the other is the New York News Bureau. These agencies provide news items in the form of news slips every few minutes. These news slips contain important news as to recent developments which might have a tendency to affect the market. These slips are delivered to subscribers' offices by special messenger.

52. News Ticker.—The news ticker operates in a manner similar to the ticker already described, only instead of printing a series of stock transactions in abbreviation on a narrow slip of paper, it prints a page on a sheet of roll paper about 6 inches wide, and provides a series of news reports on the condition of the market and of the happenings throughout the world.

LANGUAGE OF THE STREET

53. Meanings of Terms.—Wall Street has a distinct vernacular all its own. To understand it, one must mix in the life there and learn it. Some of the more common terms are here explained.

A **bull** is one who is *long of the market,* one who is holding securities and expects the market to rise.

A **bear** is a *short seller,* one who is *short of the market,* and who is trying to force the market down by selling short.

To **straddle the market** is to *hedge* one's account; that is, to be long of the market on certain securities and short in others.

A **lamb** is a person inexperienced in the stock market. When he sustains a loss he is said to have been *sheared.*

Margin is the deposit required by a broker when a customer gives him an order to buy securities or to sell them short. Usually 20 per cent. of the amount of money involved in the transaction is required. The amount by which the market value of securities hypothecated exceeds the amount loaned on them is also called the margin.

The persons operating in the stock market are called bankers, brokers, principals, investors, manipulators, speculators, professionals, lambs, plungers, room traders, bulls, bears, specialists, cliques, pools, syndicates, and the like.

When the market prices of securities change but little the market is called *steady.* The market may take on other aspects so that it is called *weak, active,* or *inactive;* it might be in *boom* or a *panic,* and the prices shown are said to rise or fall, advance or decline.

A **strong market** is one that shows substantial gains in price. It is *weak* when the prices decline. It is said to be *stagnant* when the volume of sales is low.

A **pool** is a group of operators who advance a contribution to a common fund for the purchase of certain stocks, and when the pool sells out each one takes his proportionate share of profit or loss. A **blind pool** is one in which no one but the one managing it knows what stock is being dealt in.

An operation known as **pyramiding** is the act of buying other securities from the fictitious profits of an initial investment. Thus, a man makes an initial investment on a small margin in a *rising market,* or a *bull market.* Prices advance, but instead of selling and taking his profit he still holds the investment on the original margin and the broker accepts the profit as shown on his books in lieu of cash to buy more securities on margin. Such profits are called *fictitious,* or *paper, profits,* and the man is said to be *pyramiding* his holdings. This pyramid is very likely to be upset by a decline in the market and the investor will then sustain loss.

A **wash sale** is a fictitious sale for the purpose of creating a fictitious market price.

RECORDING A PURCHASE AND SALE

54. The Broker.—As will be seen from the discussion thus far, the broker may be regarded as the middleman, or the one situated directly between the buyer and the seller. He is the one who negotiates as agent for either the buyer or seller.

New York, July 2, 19

John Doe & Co.

Buy for my account and risk

200 U. S. Steel at the market

H. Appel

Fig. 3

Therefore it can be seen that a man of business ability is required to occupy this position. It must necessarily be so, for his advice on conditions in the market and recommendations to customers are of vital importance.

Mr. Appel

WE HAVE THIS DAY Bot FOR YOUR ACCOUNT AND RISK:

BONDS OR SHARES	SECURITY	PRICE	COMMISSION	INTEREST	FEDERAL AND STATE TAX	NET	NAME
200	U S Steel	98	$ 30		$	$ 19,630	W. N. Jones & Co.

SETTLEMENT OF ALL TRANSACTIONS TO BE IN NEW YORK FUNDS.

It is agreed between broker and consumer:

1. That all transactions are subject to the rules and customs of the New York Stock Exchange and its Clearing House.

2. That all securities from time to time carried in the customer's marginal account, or deposited to protect the same, may be loaned by the broker, or may be pledged by him either separately or together with other securities, either for the sum due thereon, or for a greater sum, all without further notice to the customer.

FRANK MORAN CO.

PER ____________

FIG. 4

55. The Order to Buy or Sell.—Next to be considered are the operations in the broker's office when a customer gives an order. The customer makes out an order in some such form as shown in Fig. 3.

The order is telephoned to the exchange and there executed, the data returned to the office, and a notice as shown in Fig. 4 is given to the customer.

As shown thereon, the customer is notified to the effect that the Frank Moran Company has bought for his account and risk 200 U. S. Steel at the price of $98 per share, and that a

New York, July 2, 19

John Doe & Co.

Sell for my account and risk

100 Smelters at 93

H. Appel

Fig. 5

commission of $30 has been charged, making the net price paid by Mr. Appel $19,630. The broker from whom the security was bought was W. H. Jones & Co.

When the order was given it was entered in the Customers' Order Book, when executed it was entered in the Purchase and Sales Book, then into the blotter, and from the blotter it was posted to that customer's ledger account, which was debited for the net amount as shown on the notice.

Should Mr. Appel give an order to sell, it would be given as shown in Fig. 5.

As before, the order is telephoned to the Exchange, executed, and then the data telephoned back to the office, and a notice is given Mr. Appel to the effect that his order was executed.

The notice is given in the same form as that shown in Fig. 4, and in this case is filled out to read: We have this day *sold* for your account and risk, Shares *100;* Securities, *Smelters;* Price, *$93;* Federal and State Tax, *$4;* Net, *$9,281;* Name of Broker, *T. O'Keefe & Co.* The net price received is made up of the market price received less commission charges and transfer tax to the state and federal governments; because these are charges which the customer must pay, therefore they are deducted.

As in the case of the purchase previously described, the entries are made in the several records there mentioned and the customer's account is credited with the amount noted in the net column.

The manner of handling each and every record used in the broker's office will be taken up in a later Section.

THE CURB MARKET

56. Beginning of the Curb Market.—As has been previously explained, the stock brokerage business first began to function on the curb stones of the streets of Paris and London. Later on, the curb market began to function in New York under an old buttonwood tree near 68 Wall Street. Securities were bought and sold at this place in New York until about the time of the Civil War, when the market was removed to William Street, between Exchange Place and Beaver Street. Trading in this market, just as in London and Paris, began at an early hour and continued until 6:00 P. M. on the curb, and later in the hotel lobbies.

57. The Curb Association.—During the interval of time as described above, the curb market might be termed unorganized. However, in 1910, the New York Curb Association was formed through the efforts of a few men who were far-sighted enough to see the benefits accruing from an organization.

There are two hundred and fifty members of this association and the dues of each member are $100 per year.

Under the existing laws of the association, the trading on the curb is not restricted to the members only, but it is open to all who choose to trade there.

58. The Market Place.—The present meeting place for the curb market is on Broad Street in front of the Wall Street Journal building.

59. Business Hours.—Just as on the Exchange, the business hours extend from 10:00 A. M. till 3:00 P. M. During this time the firms who trade on the curb keep a representative there, whose duty it is to execute the customers' orders in the open market. The manner of trading is similar to that on the Exchange. The buyer finds the seller, a trade is arranged, the order is executed, and the data returned to the office.

The broker notifies his office of the trades put through, by means of telephones located in booths situated in the windows overlooking the curb market. When an order is received from a customer, the broker's office notifies the telephone clerk in this booth; he, in turn, notifies the curb broker by means of a sign language, or signals, similar to those used by deaf and dumb persons. The broker executes the order and by signs notifies the telephone clerk, who notifies the office.

60. Method of Accounting.—The method of accounting is similar to that employed for recording Stock Exchange transactions and will be explained in *Stock Brokerage Accounting Methods.*

61. Securities Dealt in.—The securities traded in on the curb are those that have not as yet been admitted to the Exchange for trading; and, accordingly, most Stock Exchange houses maintain representatives on the curb.

In spite of the fact that the securities there dealt in are not listed on the Exchange, there are many important issues dealt in on curb. For example, up until July, 1919, the stocks of the Standard Oil companies were traded in wholly on the curb. In 1919, application was made to list certain of the securities of that company on the Exchange.

From this brief discussion it will be seen that the curb market plays an important part in the financing of new stock companies, for, as has been explained, the security of a new corporation is first dealt in on the curb market, and the security will continue to be bought and sold there, by the public and others, until it is listed on the Exchange.

STOCK-BROKERAGE ACCOUNTING METHODS

BOOKS AND METHODS USED

INTRODUCTION

1. As has been explained in the previous Section, the transactions resulting from the buying and selling of securities by a broker for his customers are numerous. For this reason a system of books of account has come into use in brokers' offices for recording all necessary data regarding any single transaction, such as the kind of security bought or sold, the quantity (number of shares) bought or sold, the price, for whose account, from whom bought, to whom sold, and many other important facts, which will here be taken up and explained in detail.

The books of account commonly used in a broker's office in Wall Street are as follows:

1. Order Book.
2. Purchase and Sales Book.
3. Margin Record.
4. Clearing House and Ex-Clearing House Blotters
5. Customers' Ledger.
6. Private Ledger.
7. General Ledger.
8. Securities Ledger.
9. Stocks Borrowed and Loaned Book.
10. Money Borrowed and Loaned Book.

11. Stock Transfer Register.
12. Vault List.
13. Revenue Tax Register (2), required by law.

The records just mentioned are to a large extent prescribed by the laws of New York State or the Federal Government, or by the laws of the New York Stock Exchange. It may therefore be safely stated that the same system of bookkeeping is used by each broker, and each office does not follow a system of bookkeeping that is entirely a product of the bookkeeper's own selection.

The system of bookkeeping and accounting in operation in Wall Street is very efficient, for it has been created to meet the demands of that business, and is not a system forced upon it.

ORDER BOOK

2. Use.—The Order Book is a book in which the orders of the customers are recorded. As has been explained in the previous Section, when a customer gives an order to a broker to buy or sell for his account and risk, he does so in writing.

SELL ORDERS July 1 192

	AMOUNT	SECURITY	PRICE	EXPIRES	CUSTOMER	SOLD TO
	200	Rubber	90	G.T.C.	W. A. Fordham	W. L. Foster
	10	Anaconda	85	3 da	H. Avery	C. A. Bauerfeld
	100	Sears Roebuck	108	July 1	H. Avery	R. C. Templeton

Fig. 1

These orders, as soon as given, are written up in the Order Book. If it is an order to sell, then it is entered under the *sell* orders side, as in Fig. 1; if it is an order to buy, it is entered under the *buy* orders side, Fig. 2.

3. What Is Recorded.—The facts recorded regarding a sell order are as follows:

1. The amount of security to be sold.
2. Name of security.
3. The price at which to sell.
4. When the order expires.
5. Name of customer giving the order.
6. Name of broker to whom sold.

4. Stop Orders.—In Wall Street, a customer very often sets a figure at which to sell certain of his holdings in case of a decline in the market price. Such an order is called a *stop order*. In the case of a stop order, if the customer tells the broker to sell a certain security when the price falls to a certain point, that price is recorded in the price column, Fig. 1. Then, should that order be good till some other order takes its place, it would be good till countermanded, and this information, represented by the abbreviation *G. T. C.*, would be recorded in the column headed Expires. Then again, a customer might give an order that is to hold for, say, 3 days; in that case, the date of expiration, *3 da.*, would be recorded in the Expires column. The name of the broker to whom the sale is made is recorded in the column headed Sold To.

In the case of a buy order, the facts recorded are the same, with the exception that the name of the broker from whom the security was bought is included in the Bought From column.

5. Example of Use.—To see just how this record is used, consider the following transactions, which are to be entered as shown in Figs. 1 and 2. Suppose that on July 1, 192—:

1. W. A. Fordham gives Broker John Jones an order to buy for his account and risk 100 shares U. S. Steel at the market price (which is $98\frac{7}{8}$ a share).

2. W. A. Fordham gives Broker John Jones an order to sell for his account 200 shares Rubber at $90 a share.

3. H. Aery gives Broker John Jones an order to buy for his account and risk 10 shares Studebaker at $70 per share; 100 shares Sears Roebuck at $105 per share.

4. H. Aery gives Broker John Jones an order to sell for his account 10 shares Anaconda Copper at $85 per share, in 3 days; 100 shares Sears Roebuck at $108 per share on July 1.

It is here assumed that these orders were executed on July 1, 192—, in order to proceed with the explanation. Just as fast as the orders to buy or sell come in, the order clerk enters them in the Order Book. Mr. Fordham's first order to buy 100 U. S. Steel at the market, which price was $\$98\frac{7}{8}$ per share, is entered in the Order Book, Fig. 2, as follows: In the Amount column is recorded the number of shares to be bought; in the Security column is recorded the name of the stock; in the Price column is recorded the price at which the purchase takes place. In the Expires column is recorded how long a

BUY ORDERS July 1 192_

	AMOUNT	SECURITY	PRICE	EXPIRES	CUSTOMER	BOUGHT FROM
	100	U S Steel	$98\frac{7}{8}$	July 1	W. A. Fordham	J. T. Lamb
	10	Studebaker	70	G.T.C.	H. Aery	H. A. Frank
	100	Sears Roebuck	105	G.T.C.	H. Aery	T. J. Delaney

FIG. 2

time the order is good for—in this case it expires very quickly—and in the Customer column is recorded the name of the customer who gives the order to buy, in this case W. A. Fordham. The making of all the entries to this point may be considered as operation No. 1.

When the order is received it is immediately telephoned to the firm's representative on the floor of the exchange. He executes the order and telephones the result back to the office. Then takes place operation No. 2, which consists of entering the name of the broker from whom the stock was bought; in this case the selling broker was J. T. Lamb. Then, since the customer ordered the security to be bought at the market price, whatever it might be, the price entry would be made in the

price column. If, however, the customer had ordered the security to be bought when the market reached a certain price, the price specified would have been entered in operation No. 1.

From this explanation, the entries of the other transactions, as shown in Figs. 1 and 2, will be easily understood.

PURCHASE AND SALES BOOK

6. Use.—The Purchase and Sales Book is a book of original entry. It is used to record all the purchases and sales of securities by a firm of brokers, for their customers after the orders are given and executed.

In this record the following facts are recorded regarding a given transaction:

1. Name of the broker who executed the order.
2. From whom bought or to whom sold.
3. Number of shares bought or sold.
4. Description of security.
5. Market price at which bought or sold.
6. For whose account bought or sold.
7. Time of delivery under terms of contract.
8. The total amount paid.

7. Since there are what are known as Clearing House and Ex-Clearing House stocks, it would naturally be assumed that there were two books used, one for recording each group of items. On the contrary, there is only one Purchase and Sales Book used, but in that book all Clearing House items are usually segregated from the Ex-Clearing House items.

8. Bids and Offers.—For convenience, the provisions of laws of the New York Stock Exchange regarding bids and offers, which were given in the preceding Section, are here repeated, and details of recording of bids and offers are explained.

Under the laws of the New York Stock Exchange, bids and offers for the purchase and sale of securities may be made as follows:

1. *Cash:* Security to be delivered on the day of purchase or sale and payment made for it.

2. *Regular way:* Security to be delivered and payment to be made therefor on the next business day following the purchase or sale.

3. *At 3 days:* Security to be delivered on the third day following the contract to buy and sell.

4. *Buyer's or seller's options:* For delivery of security not sooner than the fourth day nor later than 60 days after the date of contract. Contracts are exchanged on the day following the transaction. Some of these contracts provide for interest and others do not. Where the contracts do not provide for interest they are known as "flat."

Under these buyer's and seller's options the buyer may demand delivery, or the seller has the right to deliver the securities at any time before the expiration of the option. On such contracts, one day's notice must be given at or before 2:15 P. M. on the day before the securities are deliverable prior to the maturity of the contract.

9. Abbreviations Used.—The information regarding time of delivery under the terms of the contract is recorded in the Time column by means of certain abbreviations, as follows:

1. Cash, *C*.
2. Regular way, *R*.
3. At 3 days, $B\,O^3$ or $S\,O^3$.
4. Buyer's or seller's options, $B\,O^4$ or $S\,O^{30}$.

The abbreviations for *cash* and for *regular way* explain themselves; *B O* and *S O* mean buyer's option and seller's option, respectively, and the exponent indicates the maturity of the contract. Thus, if you were selling stock and agreed to make a delivery on the third day after the date of contract, then, since you were the seller, you would hold the seller's option at 3 days, or, in abbreviation, $S\,O^3$. On the other hand, were you the buyer at 3 days, then you would hold the buyer's option at 3 days, or, in abbreviation, $B\,O^3$. If the option were for any other time, as 4 days or 30 days, it would be written as shown, $B\,O^4$ or $S\,O^{30}$, as the case might be.

PURCHASES A. DATE July 1, 192–

NAME OF BROKER	FROM WHOM BOUGHT	NUMBER OF SHARES	DESCRIPTION	PRICE	FOR WHOSE ACCOUNT	TIME	AMOUNT
F. A. Downe	J. T. Lamb	100	U. S. Steel	$98\frac{7}{8}$	W. A. Fordham	R.	9 887 50
Downe	W. A. Frank	10	Studebaker	70	H. Avery	R.	700
Downe	T. J. Delaney	100	Sears Roebuck	105	H. Avery	C.	10 500

FIG. 3

10. Example of Use.—As an example of the use of the Purchase and Sales Book, Figs. 3 and 4 show the entries resulting from the transactions noted in the Order Book, as listed in Art. **5.**

In the case of Mr. Fordham's order, for example, it will be seen that under Name of Broker is recorded the name of F. A. Downe, the broker who bought the stock; under From Whom Bought is recorded the name of J. T. Lamb, which was obtained from the Order Book, Fig. 2. Under Number of Shares is recorded the number of shares bought, in this case 100; under Description is the name of the stock, in this case U. S. Steel; under Price is the market price paid; under For Whose Account is the name of the person giving the order, in this case W. A. Fordham.

In the Time column is recorded the time

SALES A. DATE July 1, 192-

NAME OF BROKER	TO WHOM SOLD	NUMBER OF SHARES	DESCRIPTION	PRICE	FOR WHOSE ACCOUNT	TIME	AMOUNT
F. A. Downe	W. L. Foster	200	Rubber	90	W. A. Fordham	R.	18 000
Downe	C. A. Bauerfeld	10	Anaconda	85	H. Avery	R.	850
Downe	R. C. Templeton	100	Sears Roebuck	108	H. Avery	R.	10 800

Fig. 4

when the security will be delivered under the terms of the contract. In this case the contract was made in the regular way, and that fact is recorded by the symbol *R*.

The Amount column records the total cost under terms of contract, in this case $9,887.50.

The other transactions are entered in a similar manner.

CUSTOMER'S MARGIN RECORD

11. Use.—As a customer may buy stocks and bonds on margin, it is highly important that the broker have at hand a statement of the amount of capital each customer has advanced on his purchases which the broker is holding for him. Therefore the Margin Record was introduced to fill that need.

This record is one of the most important kept in the broker's office. It is also the one most carefully watched by the broker, especially when the buying and selling of securities is very large and the market is very active.

The Margin Record is kept either on what are known as margin cards or in some loose-leaf record, the latter being usually preferred. This record shows at a glance all the information regarding a customer's account as listed below:

1. The number of shares—long, short, hedged.
2. A description of the securities held.
*3. The net price of those shares.
4. The market price paid.
5. The margin deposit (ledger credit balance).
6. The margin remaining to carry the holdings, stated either in points or percentages.

12. Marginal Requirements.—Usually the broker requires the customer to deposit 20 per cent. of the amount of money involved in a given transaction, as a margin, on all securities which that customer may have bought or sold short. Thus, if an account were long, that is, if the customer holds,

---

*The net price is made up of the market price plus commission charges, if a purchase; if a sale, the tax and commission charges are deducted from the market price.

say, 100 shares of stock costing $10,000, then that customer would be required to deposit as a margin with the broker the sum of $2,000. Likewise, if the customer had sold short (that is, sold securities which he did not own) a like amount of securities with a value of $10,000, he would be required to deposit a margin of $2,000 on his short sales.

It is readily seen that by means of this record the broker is better able to determine when more cash or margin must be furnished by the customer in order to still maintain his account so that the broker himself will not sustain a loss, or so that he will not be forced to sell the securities which he is holding for that customer.

13. Manner of Use.—Whenever an entry is made in the Purchase and Sales Book, a corresponding entry is made in the same customer's Margin Record. Thus, if a customer, John Jay, buys 100 shares of Anaconda Copper at $50 per share, the first entry would be made in the Order Book, then in the Purchase and Sales Book, and then immediately the entry would be made in the customer's Margin Record, showing:

1. The number of shares bought or sold short.
2. The kind of stock.
3. The market price and net price.
4. The margin of deposit (credit balance).
5. The margin remaining after making the necessary adjustments regarding any losses or gains sustained.

With this information it is an easy matter to find the margin that a customer is maintaining on his holdings at any time. All that is necessary is to find the market value of all securities held long or sold short and compute 20 per cent. of it; for, as has been stated, a margin of 20 per cent. is required by the broker.

Should the margin fall considerably below 20 per cent., then a call would be made by the broker on the customer for enough more cash or securities to *recover* (that is, to make up) the margin to the original 20 per cent. required.

14. Example of Use.—If Mr. Fordham's orders as recorded in the Purchase and Sales Book are his only trans-

actions with Broker F. A. Downe, the standing of his account as to marginal deposit would be determined by the following entries:

As the record of purchases shows that the broker is holding 100 shares of U. S. Steel for Mr. Fordham's account, Mr. Fordham is long of the market to that extent; therefore, an entry is made on the long side of his Margin Record, showing the number of shares his account is long, the kind of stock, and the net price, which is the market price plus commission charge of the broker and any additional expense. The market price paid for the security is also recorded.

In the record of sales it is found that Mr. Fordham has sold short 200 shares of Rubber, and the data regarding his short sale are therefore recorded, showing the number of shares and kind of stock short, the net price, and the market price of the stock sold short.

Since all securities held long for a customer on a margin or sold short are required to be margined by a deposit of 20 per cent. of the value involved, and since Mr. Fordham is holding $9,887.50 worth of stock on margin, he will be required to deposit 20 per cent. of it, or $1,977.50, and on the 200 shares of Rubber which he has sold short he will deposit with the broker 20 per cent. of $18,000 or $3,600, which will give him a credit balance in the ledger of $5,577.50. As Mr. Fordham goes on trading, his credit balance in the ledger will change from time to time, as will the securities held long or sold short, so the margin records are very changeable.

THE BLOTTERS

15. Use.—In the bookkeeping system the next book to be used is the *Blotter*. This record may be said to be a combination of the Cash Book and the Journal. Its ruling and arrangement are such as to indicate whether an entry for a given transaction is only to show a transfer from one account to another or whether an exchange of cash has taken place.

There are usually two blotters kept, one for entering the transactions in Clearing House stocks in *100-share lots or*

multiples thereof. This Blotter is called the Clearing House Blotter. The other blotter in use is known as the Ex-Clearing House Blotter, and it records transactions in Clearing House stocks which are of less amount than 100 shares; it is used also to record all transactions in stocks that are not Clearing House stocks, as well as to record all transactions in bonds. Each one of these blotters will be taken up in detail.

16. Alternating Blotters.—In brokers' offices there are usually two sets of blotters kept for each division of stock as explained above. They have one Clearing House Blotter known as the Monday, Wednesday, and Friday C. H. Blotter, and it records all transactions that have taken place on Tuesday, Thursday, Friday, and Saturday; also, one known as the Tuesday and Thursday C. H. Blotter, and it records all transactions in Clearing House stocks occurring on Monday and Wednesday of each week.

In the same way two Ex-Clearing House Blotters are used, on corresponding days, for recording all transactions that are Ex-Clearing House.

By means of the alternating blotters it is possible for the bookkeepers to keep the customers' accounts posted to date.

ENTRIES

17. By referring to the forms, Figs. 5 and 6, showing the ruling of each blotter, it will be plainly seen that as to ruling and arrangement the blotters are identical. So a description of the manner of making an entry in one blotter will explain the method of operating either.

When a transaction is entered in the Purchase and Sales Book, the same transaction is journalized in the Blotter. Should the transaction in question be a sale, then it would be entered on the To Deliver side of the Blotter and the following data would be recorded, namely:

1. To whom sold.
2. Number of shares sold (quantity).
3. A description of the shares sold.

4. The price paid, on the market, per share.

5. The amount paid in settlement of contract.

6. The commission charged by the broker for his services of selling.

7. Tax paid at the rate of $2.00 per hundred shares to the state of New York and also at the same rate to the Federal Government, on all stock sold with $100 par value.

8. The total amount received in settlement of each transaction, which includes the amount paid for the stock *minus* any additional expense such as commission and tax and interest.

9. The name of the account affected.

On looking back to the forms, no doubt the reader wonders where the interest items come from, which would be entered in the column marked Interest. In the Clearing House Blotter the interest items will come from interest on all borrowed and loaned Clearing House stocks which have been *called* or *returned*. So, should a broker have to borrow stock to make a delivery for a customer on a short sale or for any other reason, that broker would collect the interest coming from the transaction; for, it will be remembered that the broker borrowing the stock will give his check for the full market value of the stock borrowed, and he will receive interest on the *amount given* at an agreed rate. On the other hand, should the broker loan stock, then, instead of having an interest credit, he would have an interest debit.

In the Ex-Clearing House Blotter, interest items will arise from money borrowed and loaned as well as from borrowed and loaned stock of the Ex-Clearing House division of stock.

Should the transaction be a purchase instead of a sale, then the data recorded would be the same as that for a sale, with the exception that instead of to whom sold we would record from whom bought; also, there would be no tax item, for no tax is paid by the purchaser of securities. Interest would be included, should any be due, from money loaned or stocks returned.

18. Use of Blotter as a Cash Book.—So far, the Blotter has been considered only as it records the data regard-

To Receive *July 1, 192–*

From Whom Bought or Received	Quantity	Description	Price	Amount	Interest	Commission	Tax	Total Amount	Whose Account	Numbers	Folio
J. J. Lamb	100	U. S. Steel	$98\frac{7}{8}$	9887 50		15 –		9902 50	W. A. Fordham		
						30 –	8	38	Q		
Clearing House			CH.								
Balance to Deliver	200	Rubber	99	19800 –				19800 –	Clearing House a/c		
				29687 50		45 –	8	29740 50			

FIG. 5 (*a*)

To Deliver

To Whom Sold or Delivered	Quantity	Description	Price	Amount	Interest	Com-mission	Tax	Total Amount	Whose Account	Numbers	Folio
W. L. Foster	200	Rubber	90	18000 –		30 –	8 –	17962 –	W. A. Fordham		
						15 –					
								4 –	Federal Tax a/c		
								4 –	N.Y. State Tax a/c		
								45 –	Commission a/c		
Clearing House								38 –	O		
			CH.								
Balance to Receive	100	U. S. Steel	99	9900 –				9900 –	Clearing House a/c		
Check to balance				1787 50				1787 50			
				29687 50		45 –	8 –	29740 50			

Fig. 5 (b)

To Receive July 1, 192–

From Whom Bought or Received	Quantity	Description	Price	Amount	Interest	Com-mission	Tax	Total Amount	Whose Account	Numbers	Folio
H. A. Frank	10	Studebaker	70	700 —		1 50		701 50	H Aery		
T. J. Delaney	100	Sears Roebuck	105	10500 —		15 —		10515 —	H Aery		
						16 50	4 40	20 90	O		
		Balance		96027 50				96027 50	Seaboard Nat'l Bank		
				107227 50		33	4 40	107264 90			

FIG. 6 (a)

To Deliver *July 1, 192–*

To Whom Sold or Delivered	Quantity	Description	Price	Amount	Interest	Com-mission	Tax	Total Amount	Whose Account	Numbers	Folio
		Balance		90000 —				90000	Seaboard Nat'l Bank		
C A Bauerfeld	10	Anaconda	85	850 —		1 50	40	848 10	H. Avery		
R. L. Templeton	100	Sears Roebuck	108	10800 —		15 —	4	10781 —	H. Avery		
		Cash		5577 50				5577 50	W. A. Fordham		
								20 90	"		
						16 50					
								2 20	Federal Tax a/c		
								2 20	N. Y. State Tax a/c		
								33 —	Commission a/c		
				107227 50		33 —	4 40	107264 90			

FIG. 6 (*b*)

ing transactions in securities. It will now be considered as it records cash.

Rule.—*Should cash be received, it is recorded on the Deliver side of the Blotter, while if cash be paid, it is recorded on the Receive side of the Blotter.*

The explanation of this seeming error is that the custom in the street has established the fact that all sales and the cash received therefor shall be recorded on the Deliver side, the credit in this case being a credit to the customer and a debit to cash.

Also, custom has established that when a purchase is made and paid for in cash, it is to be recorded on the Receive page of the Blotter, the debit being a debit to the customer and a credit to cash.

19. Posting to the Ledgers.—All posting to the ledger accounts is done from the Blotter, and in posting the following rule should be followed:

Rule.—*When posting to the ledger account from the Blotter, should an item appear on the right-hand, or Deliver, page, it represents a credit to the customer and a debit to cash. Should the item appear on the left-hand, or Receive, page, it represents a credit to the cash account and a debit to the customer.*

20. Ex-Clearing House Blotter.—On each morning the bank balances from the previous day are entered in the Ex-Clearing House Blotter on the Deliver side of that record. At the same time the balances of stock from the Clearing House Blotter of the previous day are entered on their respective sides. Thus, a Clearing House stock balance to receive would be entered on the Receive side of the Ex-Blotter, as it is often called, while a balance to deliver would be entered on the Deliver side of the Ex-Blotter. Also, should a draft have been submitted to the Clearing House, it would appear on the Deliver side of the Ex-Blotter; likewise, a check would appear on the Receive side of the Ex-Blotter.

21. Example of Entries in Blotter.—A transaction having been executed, a copy of that transaction goes to the

blotter clerk, who proceeds to journalize it in either the Clearing House or the Ex-Clearing House Blotter, as the case may be. Let us assume the position of the blotter clerk and journalize the transactions that were shown in the Purchase and Sales Book.

Going over the sales, we pick out the items in 100-share lots of Clearing House stock and enter them on the Deliver side of the Clearing House Blotter, giving the data as shown in Fig. 5.

We enter the items of transactions in Ex-Clearing House stock in the Ex-Clearing House Blotter, recording the data as shown in Fig. 6.

We then would enter the purchases on the Receive side of each blotter as the case may be, being careful to record all 100-share lots of Clearing House stock, or multiples thereof, in the Clearing House Blotter, and all other items in the Ex-Clearing House Blotter.

Let us assume now that the bank balance from the previous day was $90,000, and that there had been no stock balances; then we would enter the bank balance of $90,000 on the Deliver side of the Ex-Clearing House Blotter as the first entry for that day.

Naturally, the reader is wondering how we are to enter cash received as margin from customers. According to the rule that all cash received is entered on the Deliver side, all that we need to enter is the amount received, crediting the customer's account and debiting cash. Thus, the margin of $5,577.50 paid by Mr. Fordham is entered in the Blotter on the Deliver side, as shown in Fig. 6.

BALANCING THE BLOTTERS

22. Clearing House Blotter. — Having completely entered the data regarding each individual transaction as called for in each column on the Receive side, to balance that side it would then be necessary to total the individual money columns, then cross-foot the several totals, as appear in the amount, commission, interest, and tax columns, and the result should be the same as appears as the total of the Total Amount column.

The third step in the operation is to carry the total of the commission column to the commission column on the deliver side, add this amount to the total of the commission column on that page, then extend that total obtained to the Total Amount column, and the account to be credited is *commissions*.

The fourth step in the operation is to extend the total of the tax column on the deliver side to the Total Amount column, in which the amount is shown divided, the Federal tax account and the New York State tax account being credited with their respective portions of the tax collected on all sales or transfers. The rates of tax in each case are the same, as will be explained later under Revenue Tax Register.

The fifth step consists in totaling the several columns on the To Deliver side as they appeared before steps three and four were performed, then, by carrying over the totals of the commission and the tax columns to the Total Amount column, and footing the Total Amount column, the new total should agree with the amount column and prove the correctness of the work.

The *O* in the Whose Account column is a symbol to show to the bookkeeper that the item opposite it in the Total Amount column is not to be posted to any account in the Ledger, although the item is necessary in order to make the totals of the Total Amount columns of the Receive and the Deliver sides agree.

The sixth step is balancing the stock in order to know what the stock balances consist of. The method of procedure is as follows: Go over the Receive and Deliver sides of the Blotter and set off against each other all transactions in the same stock, and the balance to receive or to deliver can be arrived at. For example, suppose that we had bought 100 shares of U. S. Steel, and sold 400 shares of the same stock for our customers, then, setting off one transaction against the other, we would have a balance of 300 shares of U. S. Steel which we had sold over that which we had bought, so the Blotter would show a balance to deliver of 300 shares. Should the conditions have been reversed and we had bought 400 shares of U. S. Steel and sold only 100 shares, then our balance to receive would have been 300 shares.

Having balanced the stock, the seventh step is to carry the balances to deliver to the Receive side of the Blotter, and the balances to receive to the Deliver side; then, using the closing price or the Clearing House price per share, make the extension to the amount columns, on the Receive and the Deliver sides, and extend the total of these to the Total Amount columns on either side of the blotter.

The eighth step is to total the amount columns and the total-amount columns on both the Receive and the Deliver sides, and compare the results; that is, the total of the amount column on the Receive side should be compared with the total of the amount column on the Deliver side and the difference between these two totals should exactly equal the difference between the totals of the Total Amount columns of either side.

Should the cash totals on the Deliver side be greater than the cash totals on the Receive side, then we know that a profit has been made; that is, the excess of value received for securities sold is greater than that paid for securities bought. Therefore, since the Clearing House will make the adjustments for us during the operation of its system of clearing, we have a Clearing House balance coming to us; so we note that and submit a draft on the Manhattan Company for this profit. This amount is entered on the Receive side as *Clearing House draft* in both the Amount and Total Amount columns. This having been done, the Receive and the Deliver sides of the Blotter are in balance completely.

Should the cash total of the Receive side be greater than that of the Deliver side, then a loss has been sustained, so then we would make note of the amount and submit to the Clearing House a check payable to the Manhattan Company. This would be noted on the deliver side of the Blotter as *Check to balance,* as in Fig. 5. Then the sheet should be completely in balance.

All this having been done, the final operation is to enter all Balances in Stock, whether to receive or to deliver, along with the cash balances, whether check or draft, in the Ex-Clearing House Blotter in the manner already explained.

At this point it may be well to state that the sheet as submitted to the Clearing House for the New York Stock Exchange is an exact copy of the Clearing House Blotter when it has been completely balanced.

23. Balancing the Ex-Clearing House Blotter. Having learned how to balance the Clearing House Blotter, as already explained, it will be quite simple to balance the Ex-Clearing House Blotter. The procedure is as follows:

1. Treat the tax and commission columns as you did in balancing the Clearing House Blotter, by totaling the two columns and carrying the totals to the Total Amount column on the Deliver side, crediting Commissions account with the total commission, and the Transfer Tax and the Federal Tax accounts with the respective taxes collected and paid to the Federal and State governments as shown by the total of the tax column.
2. Foot the Total Amount columns on the Receive and the Deliver sides.
3. Deduct the Receive footing from the Deliver footing, and the result will be representative of the balance carried in the bank accounts. This balance is proved by comparison with the balances in the check books. Why the Receive footing is deducted from the Deliver footing will be clear if we recall the rule as to why all sales and cash received are recorded on the Deliver side.
4. Carry the balance just obtained to the Receive side and break it up into the several balances carried in the several banks, if there be more than one bank account. In other words, charge each bank with the balance on deposit.

REVENUE TAX REGISTER

24. Function.—The Revenue Tax Register is used to record all sales or transfers of stock, and the payment of stamp tax thereon, as provided under the amendment to the New York State law, which became operative June 30, 1905, and which provides for a tax of 2 cents per share, of $100 par value stock, on all stock transferred or sold.

This record provides for the recording of the date of sale or transfer; name of stock; the number of shares sold or transferred; par value of each share of stock; the name of the purchaser or the transferee; the number of stamps used, together with the face value of each stamp; also a column for entering the total value of all stamps affixed.

25. Importance.—Along with the fact that this record is required by law, it is of great importance in alleviating the tendency of employes to steal revenue stamps, for, by means of the data provided, it is an easy matter to check up the New York State Tax account.

26. Methods of Checking.—To check up the tax account, all that is necessary is to foot the value column, and add the amount of stamps on hand, which is found by inventory; the resulting figure should equal the amount on hand at the beginning of the period, as shown in the New York Tax Account in the General Ledger.

At the present time the Federal Government has a tax which is also collected on all stock sold or transferred. For this, a separate tax register is kept. This record is an exact duplicate of the one already described. This Federal Tax rate is the same as that charged by New York State. To check up on the Federal Tax account, the manner of procedure is the same as described above, with the exception that the Federal Stamp Account is the name of the account in the General Ledger.

27. Rates Charged.—Under the New York State law, and also the Federal law, the following rates are charged on all sales or transferring of stock.

New York State rate:

Stock with par value of $100, stamp tax is $2.00 per 100 shares
Stock with par value of $ 50, stamp tax is $1.00 per 100 shares
Stock with par value of $ 25, stamp tax is $ .50 per 100 shares
Stock with par value of $ 10, stamp tax is $ .20 per 100 shares
Stocks with no par value, the stamp tax is $2.00 per 100 shares

Federal rate:

Stock with par value of $100 or less, tax is $2.00 per 100 shares
Stock with par value of over $100, tax is 2 per cent. of the cash involved

John Jones
(Broker's Name)

DATE	NO. OF SHARES	PAR VALUE	STOCK	NAME OF PURCHASER	NO. AND VALUE OF STAMPS 2c	4c	10c	20c	50c	$1	$2	$10	$20	VALUE OF STAMPS
July 1	200	100	Rubber	H. L. Foster							2			4 —
" 1	10	10	Anaconda	C. A. Dunfield				1						20
" 1	100	100	Sears Roebuck	P. C. Templeton							1			2 —

Fig. 7

28. Example of Use. Remembering the fact that the taxes payable to the Federal government and to the New York State government are alike, to explain the manner of using one tax register will explain the other. The form of the New York State Revenue Tax Register is shown in Fig. 7. The data for the entries are obtained from the Deliver side of the Blotters. Reference to the Clearing House Blotter shows that on July 1 Mr. Fordham sold 200 shares of Rubber; so the state tax paid was $4, and stamps for that amount were used. This sale, therefore, is recorded in the Tax Register with the data required, as shown in Fig. 7. To pay the New York State tax, there would be required two $2 stamps to be affixed to the stock certificate. It will be noticed that only half of the amount registered in the Tax column of the Blotter is recorded; the other half is recorded in the Federal Tax Register.

In the Ex-Clearing House Blotter is a tax item of $4.40 which is divided in the same way, one-half being recorded in the New York State Tax Register and the other half in the Federal Tax Register.

CUSTOMERS' LEDGER

29. Use.—In order to record completely the transactions of his customers, it is necessary for the broker to segregate all the individual transactions entered into in the execution of a customer's order to buy or sell securities. For this purpose the ledger known as the Customers' Ledger is used; in it all the transactions executed under a certain customer's name are recorded in the account bearing the name of that customer.

This ledger may truly be considered as a part of the General Ledger, for there is no controlling account for the Customers' Ledger appearing in the General Ledger.

Since this ledger is a part of the General Ledger, it naturally follows that, in order to have a true expression of the business conditions as shown by the Balance Sheet, it will be necessary to see that the balances appearing in the Customers' Ledger also appear on the Balance Sheet.

30. Facts Recorded.—On the debit side are recorded:

1. All purchases of securities for the owner of the account; these entries are posted from the Blotter, and in the Ledger are shown the date of purchase, the number of shares and kind of stock, the market price paid, also the total amount paid for the stock, which includes the market price plus the commission charge.

2. All cash withdrawn by the customer whose account it is.

3. All interest charges.

On the credit side are recorded:

1. All sales of securities for the owner of the account; these entries are posted from the Deliver side of the Blotter, and show the date of sale, the number of shares and kind of stock sold, the market price received for the stock on the market, and the total amount received by the customer after the broker has deducted his commission charge and the tax charge.

2. All margin deposits made by the customer.

3. All short sales.

4. All interest allowed on margins deposited on short sales. The usual rate of interest allowed on margins is 2 per cent.

The broker may also divide equally with his customer the interest that comes to him as a result of his customer's short sale. Thus, if a broker borrows stock to make a delivery on his customer's short sale, he must give that broker from whom he borrows the stock a check for the full market value. This broker in turn pays the borrowing broker interest for the use of the money which he has received from him as a result of the borrowing of the stock, and it is this interest that the broker often divides equally with the customer.

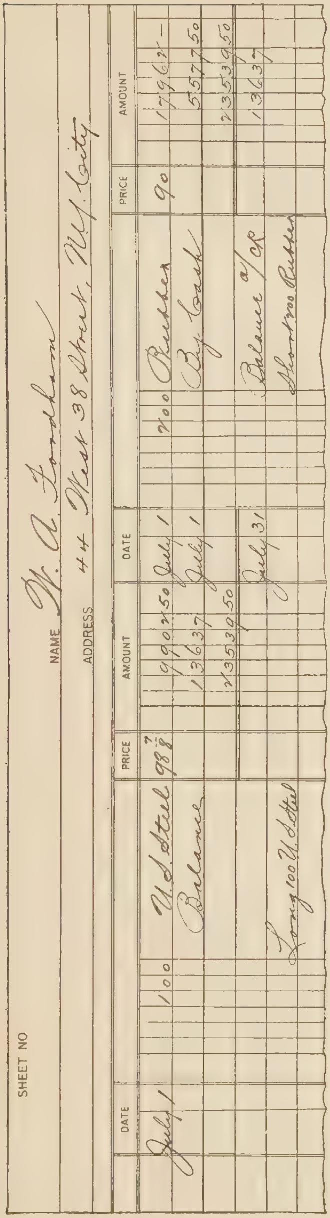
31. Balancing the Ledger.—Once a month the Ledger accounts are balanced as to cash and stock. This is done after all interest items have been posted to the accounts. At this time also the Customer's Statement is prepared. This will be explained in detail further on.

The procedure of balancing the Ledger is as follows: First, balance the account in the usual manner as to cash. Second, balance the stock by comparison of securities noted as being held long on the debit side of the account with those sold on the credit side, and note how the account stands as to securities that are still held for that customer's account, or, as they say in Wall Street, of which he is long, and as to securities which the customer sold without having owned them, that is, short sales.

It is readily seen that if a customer buys 100 shares of U. S. Steel today and sells that same 100 shares of U. S. Steel tomorrow, there can be no *stock balance,* but if the customer sold at a higher price than that at which he bought there will be a *cash balance* in his favor.

Then, again, should that customer buy 100 shares of U. S. Steel today and also sell short 100 shares of Chino Copper stock, there would be a *long* stock balance in U. S. Steel; a *short* stock balance in Chino Copper, and a cash balance, which is determined by the price at which Steel was bought and Chino Copper was sold.

32. Example of Use.—As has been explained, all posting to the customers' accounts is done directly from the Blotters. The method of posting Mr. Fordham's Ledger account,



SHEET NO

NAME W. A. Fordham

ADDRESS 44 West 38 Street, N. Y. City

DATE			PRICE	AMOUNT	DATE			PRICE	AMOUNT
July 1	100	U. S. Steel	$98\frac{7}{8}$	9902 50	July 1	200	Rubber	90	17962 –
		Balance		13637	July 1		By Cash		5577 50
				23539 50					23539 50
					July 31		Balance a/c		13637
		Long 100 U. S. Steel					Short 200 Rubber		

Fig. 8

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as shown in Fig. 8, will now be explained.

In the Clearing House Blotter, a sale is recorded for Mr. Fordham; therefore, according to the rule for posting, Mr. Fordham's account is credited with the sale of 200 Rubber at 90, and the amount credited in the column for recording the proceeds from the sale is equal to the price received on the market, minus charges for commission, tax, or any other charges.

The Clearing House Blotter also shows that Mr. Fordham has bought 100 U. S. Steel at $\$98\frac{7}{8}$, and, according to the rule, Mr. Fordham's account is debited with this purchase, the data being recorded as required by the form; the amount as recorded in the amount column is made up of the market price plus any charges for commission.

The Ex-Clearing House Blotter shows that Mr. Fordham deposited a margin of $5,577.50 on his long holdings and short sale, therefore he is credited with this amount.

If no further entries were made in Mr. Fordham's account until July 31, it would at that time be balanced in the following manner:

Proceed as to close any other account for a cash balance, then proceed to carry down any stock which the account owner may be long or short of.

Since it has been shown that the manner of posting to a customer's account in a broker's record and the manner of balancing that account are the same as used in handling any other ledger account, there should be no trouble in handling the other accounts which are affected by the other items in the Blotters.

CUSTOMER'S STATEMENT

33. Function.—The function of the Customer's Statement is to keep the customer fully informed as to his standing with the broker; for, by it, the customer can see a complete statement in detail showing what his purchases and sales have been during the month which this statement covers.

By this statement the customer may know what have been the amounts paid for the securities which he has bought, and what have been the amounts received for securities sold for his account. He may also obtain from this statement what have been the expense items of interest, commission, and tax on sales. He may see at a glance from the item of cash what has been the amount of margin deposited by him, and by adding his profit from operating to this marginal deposit, or, in the case of a loss from operating, deducting this loss from the marginal deposit, he may know the amount of his new marginal deposit remaining to carry his account.

By reference to his statement the customer may see his position as to stocks short or long. In short, the statement shows the customer all the details regarding his account as it stands in the Customers' Ledger of his broker.

34. Check on Customer's Statement.—In the Section on *Operating on the New York Stock Exchange* it was explained that whenever a brokerage firm executes an order for a customer, the customer receives a notice to the effect that the order has been executed. On this notice the complete details as to the price, name of security, and quantity sold or bought

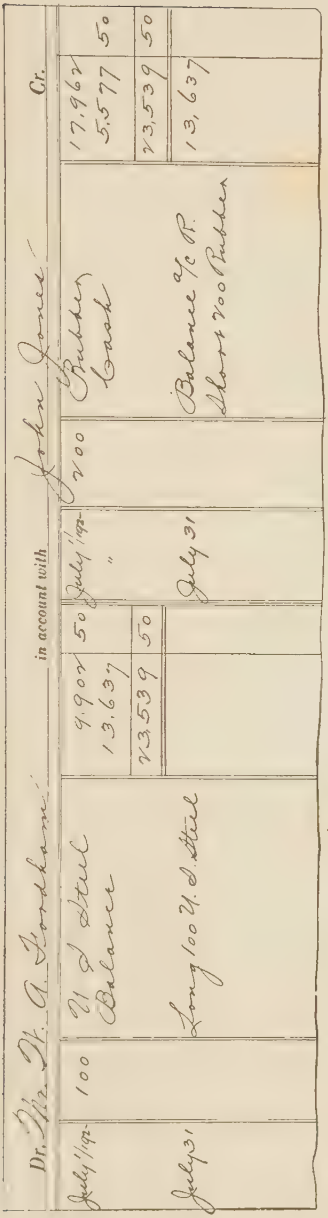


FIG. 9

are given. So, by comparing these notices with the monthly statement, a check can be had on the statement as furnished by the broker to his customer.

35. Rule for Payment of Interest.—When a broker furnishes capital to a customer he charges interest at the rate of 6 per cent. per annum, while on the credit balances he allows the customer interest at the rate of 2 per cent. per annum.

This rule is subject to the one modification that in the case of a short sale, which gives the customer a fictitious credit balance, no interest is allowed the customer by the broker. It is readily seen that any cash coming from the sale of a security which is not owned by a customer does not in the larger sense belong to that customer; for some part of it at least must be used to borrow that security at some future date in order to make a delivery on that customer's short sale, since a check for the market value of this stock will have been given to the broker from whom the stock will be borrowed. From this explanation it will be seen that in reality the customer does not have the cash as a credit to his account.

36. Relation of the Statement to the Account. The statement must agree in detail with the customer's account, as it appears in the Ledger, and must show all long holdings, all short transactions, along with the balance in cash, carried down either as a debit or a credit, as the case may be.

37. Example of Use.—It has been explained that a customer's statement agrees in detail with the customer's account in the Ledger, showing all long holdings and all short transactions, with the cash balances carried down, either Dr. or Cr. as the case may be, therefore no further discussion is needed to explain the form shown in Fig. 9, which is a statement for Mr. Fordham, taken from his account as shown in the Ledger.

SECURITIES LEDGER

38. Function.—The Securities Ledger, or Stock Record, as it is known usually in Wall Street, is used to list the securities held for customers' accounts, and to show the place of deposit, or any other disposition made of them.

39. Structure.—The Securities Ledger may be either a loose-leaf volume or a bound one, as best suits the needs of the firm. Usually the loose-leaf form is used; for the holdings of a firm doing much business are of many different kinds of securities and the volume of any one security held so fluctuates that it is often necessary to allot more than one page to a single security, and this can be easily done with a loose-leaf volume.

All certificates of the same kind of stock are listed under one head; thus, if a broker had one or one hundred different certificates of stock of the U. S. Steel Corporation, these certificates would all be listed under the heading of U. S. Steel, on the U. S. Steel sheet.

On the left-hand side of the Ledger sheet are recorded: (1) the holdings of the customers, or (2) stocks borrowed from some other broker to make a delivery on a short sale. The following data are recorded:

1. Date received.
2. Number of shares received.

U. S. STEEL

DATE	NO. OF SHARES	FROM WHOM BORROWED	FOR WHOM BORROWED	OWNER	DATE	NO. OF SHARES	TO WHOM LOANED	SHORT	PLACE OF DEPOSIT
July 1/19	100			W. A. Fordham	July 1/19	100	J. M. Ford		
July 3/19	300	J. M. Ford	W. T. Appel		July 3/19	300		W. T. Appel	

Fig. 10

3. By whom owned.
4. In case of borrowed stock, for whose account borrowed.
5. From whom borrowed.

On the right-hand side are shown the securities which are short or those that can be loaned in the street, or those which are on deposit either in the vault, as collateral for a loan at the bank, or at the transfer office. The data recorded are as follows:

1. Date.
2. Number of shares.
3. To whom loaned, if loaned.
4. For whose account short.
5 Place of deposit.

40. Manner of Use. Since the Securities Ledger is one of the records of the cashier's department, it is kept under his supervision, if not by himself directly, and from it he is able to check the securities for which his firm is responsible. When a stock certificate enters the cashier's hands, it is recorded in this Stock Record.

41. Example of Use. A page of the Securities Ledger showing the record kept of U. S. Steel stock is illustrated in Fig. 10. This shows that the U. S. Steel purchased by Mr.

Fordham was received July 2, 1919, and that it was loaned to T. M. Ford, another broker. It also shows that on July 3, W. T. Appel sold short 300 shares of Steel, and that to make a delivery for him his broker borrowed 300 shares of Steel from T. M. Ford. The manner of entering these transactions is clearly shown.

STOCKS BORROWED AND LOANED BOOK

42. Function.—The function of the Stocks Borrowed and Loaned Book is to provide a record of all stocks borrowed and loaned. Such a record is necessary in order that the broker may at all times know how he stands in regard to stocks that he has borrowed or loaned.

43. Structure.—This record is either a bound volume or a loose-leaf one, the bound volume being usually preferred. The record is divided into two parts, namely, the Borrowed and the Loaned sections, and columns for recording the following data are provided:

On the Borrowed section are recorded:

1. Date of borrowing.
2. Number of shares borrowed.
3. Description of securities.
4. From whom borrowed.
5. Price at which the securities were borrowed. (Price used is either the Clearing House price for that day or the market price at the time of borrowing.)
6. Rate of interest, and any changes in the interest rate as shown by the money market, together with the number of days the stock is borrowed.
7. The date of return.

On the Loaned section, the data recorded are:

1. Date of loaning.
2. Number of shares loaned.
3. Description of securities.
4. To whom loaned.
5. Price at which stock was loaned.

Loaned Stock

DATE	NO. OF SHARES	STOCK	TO WHOM LOANED	PRICE	INTEREST RATES AND DAYS																							DATE RET'D
					1	2	3	4	5	6	7	8	9	18	19	20	21	22	23	24	25	26	27	28	29	31		
July 2/19--	100	U. S. Steel	T. M. Ford	C.H. 99		4			$4\frac{1}{4}$	-																		July 6

Fig. 11

6. Rates of interest and number of days the stock was loaned.

7. Date of return.

44. Manner of Checking.—To provide a check upon this record one need only compare the stock listed in it with the Securities Ledger in order to verify the stock entry; whereas, the price entries are checked by comparing them with the entries in the Stock Borrowed and Loaned Account in the General Ledger.

45. Example of Use. By reference to the Loaned Stock section as shown in Fig. 11, it will be seen that Broker Jones, the owner of this book, loaned to T. M. Ford, on July 2, 100 shares of U. S. Steel at the Clearing House price of $99 per share. For this stock T. M. Ford gave Broker Jones a check, which represented the value, at Clearing House price, of the stock borrowed by him. For the use of this money, Broker Jones paid T. M. Ford interest at the rate of 4 per cent. from July 2 to 5, and $4\frac{1}{4}$ per cent. from July 5 to 6 when the loaned stock was returned to Broker Jones. Broker Jones returned the check to T. M. Ford, plus interest.

Borrowed Stock

Date	No. of Shares	Stock	From Whom Borrowed	Price	Interest Rates and Days 1	2	3	4	5	6	7	8	9	10	11	12	13	14	21	22	23	24	25	26	27	28	29	31	Date Ret'd
July 1/192-	400	Rubber	H. B. Stone	c/f. 99	4				4¼		✓																		July 7
" 3	300	U. S. Steel	J. M. Right	96			4				5																		July 9

FIG. 12

The check mark (√) in the column headed 6 indicates that the interest, 4¼ per cent., (column 5) was in force to and including the 6th, at which time Broker Jones returned the check to T. M. Ford, plus interest at the rates shown.

This explanation should make clear also the entries in the Borrowed Stock section, as shown in Fig. 12. To be able to understand and interpret these data, the main thing to be remembered is that when Broker A loans Broker B stock, then Broker B pays to Broker A a check for its market value. Then Broker A pays interest for the use of this money at the rates indicated.

MONEY BORROWED AND LOANED BOOK

46. Function. — The Money Borrowed and Loaned Book is used to record all the essential data regarding the money borrowed and loaned by a broker for his customers.

Just as a broker is able to borrow stock in order to provide for the delivery of securities which a customer has sold short, or to loan his surplus securities which are not needed

for delivery, so also is he able to borrow money from banks by depositing securities as collateral. One broker may also borrow from another broker. On the other hand, should the broker have excess funds, he may loan them to other brokers in the street. Therefore, to record these acts a Money Borrowed and Loaned Book is used.

47. Structure.—The record has two parts, the Money Borrowed and the Money Loaned sections. In the Borrowed section are recorded the following facts:

1. Date of borrowing.
2. Amount borrowed.
3. Collateral deposited.
4. Substitutions in collateral from time to time.
5. From whom borrowed.
6. Rates of interest and duration of loan.
7. Date of payment.

In the Loaned section are recorded:

1. Date of loan.
2. Amount of loan.
3. Collateral deposited.
4. Substitutions in collateral.
5. To whom loaned.
6. Rates of interest and duration of loan.
7. Date of payment.

48. Manner of Checking.—Since it is readily seen that only the securities listed on the Borrowed side of this record, as collateral for a loan to the owner of this book, are the securities controlled or owned by him, it follows that they should appear in the Securities Ledger as well, therefore the two records may be compared.

To check the money values listed in the Money Borrowed and Loaned Book, reference should be made to the Loan Account in the General Ledger to check items appearing in the Loaned section, whereas the items listed in the Borrowed section should be checked with the items as shown in the Sundry Debits account in the General Ledger.

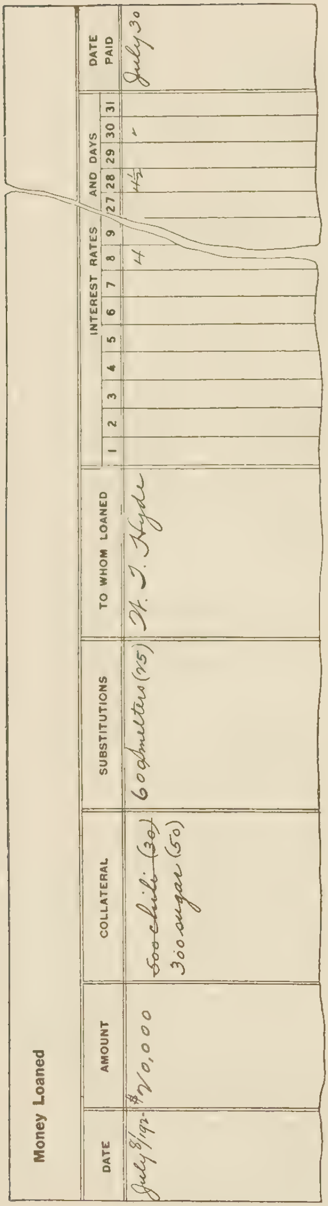
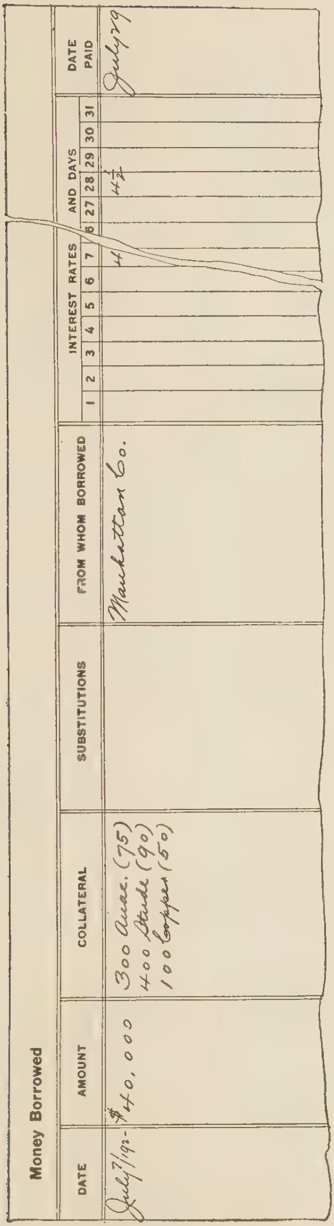


Fig. 13

49. Example of Use. The method of recording money loaned is illustrated in Fig. 13, which represents a page from the Money Loaned section. When a broker loans money, the one borrowing the money furnishes collateral for the loan. The data recorded are shown in the form. In this case, the broker who owns the record has loaned \$20,000, and for that loan W. T. Hyde has deposited collateral, at first consisting of 500 shares of Chile Copper with a market value of \$30 a share and 300 shares of Sugar with a market value of \$50 a share. Later on, W. T. Hyde makes a substitution in that collateral. He withdraws the 500 shares of Chile Copper and substitutes 600 shares of Smelters worth \$25 a share on the market. When one figures the market value of the securities deposited as collateral, as against the loan of \$20,000, it is readily seen that a wide margin is put up by the borrowing broker, W. T. Hyde.

The loan was made on July 8, 1919, at an interest rate of 4 per cent., and this rate was continued till the 28th of the month, when it was changed to 4½ per cent., which held till the 30th, when the loan of \$20,000



Money Borrowed

DATE	AMOUNT	COLLATERAL	SUBSTITUTIONS	FROM WHOM BORROWED	INTEREST RATES AND DAYS 1	2	3	4	5	6	7	8	27	28	29	30	31	DATE PAID
July 7/19-	$40,000	300 Anac. (75) 400 Stude (90) 100 Copper (50)		Manhattan Co.							4			4½				July 29

Fig. 14

was returned by W. T. Hyde and his collateral was returned to him. W. T. Hyde also paid his interest charges when the principal was returned.

With this explanation it should be clear just how the entries are made on the Money Borrowed sheet, Fig. 14, which records the money borrowed by the broker who owns this record. In this case it is seen that this broker has borrowed $40,000 from the Manhattan Company and has deposited securities as collateral, with the interest rates changing as before. The loan was paid on the 29th of the month.

STOCK TRANSFER REGISTER

50. Use.—As it frequently becomes necessary to transfer a certain block of stock from one holder's name to that of another, it is necessary to provide a record of such stocks as may be sent to the transfer office in order that none may be lost through the operation. Therefore, the Stock Transfer Register has come into use.

In this are recorded all stocks deposited with the transfer office. By reference to the form, as shown in Fig. 15, it

DATE	AMOUNT	NAME OF STOCK	IN WHOSE NAME	CERTIFICATE NUMBERS	TRANSFERRED TO	DATE	CERTIFICATE NUMBERS
July 7/92	100	U. S. Steel	A. B. Smith	2705	H. A. Fordham	July 9/92	2987

FIG. 15

will be seen that columns are provided for recording the important data regarding the stock deposited, such as:

1. Date of deposit.
2. Number of shares deposited.
3. A description of such shares.
4. In whose name, or from whom transferred.
5. Certificate number.
6. Date of withdrawal.
7. For whom withdrawn (to whom transferred).
8. New certificate number.

51. Reason for Transfer.—Whenever dividends are due on stock certificates, the dividends will naturally be paid to the last-recorded holders as shown on the books of the corporation or company whose stock these certificates represent. Therefore, it is good policy to have a stock certificate recorded under the name of the present owner, especially when a dividend is due.

In this connection it is well to know that the usual custom in the street is for the broker to charge $\frac{1}{2}$ of 1 per cent. for the collection of dividends on certificates held for customers, and 1 per cent. on all coupons collected.

52. Example of Use.—Fig. 15 shows the entries made in the Stock Transfer Register in connection with the transfer of the 100 shares of U. S. Steel, which Mr. Fordham bought, from the name of the previous owner to his own name.

The headings for each column, with the exception of "In whose name," require no further discussion. The column "In whose name" is used to record the previous owner's name as appeared on the stock certificate when that certificate was delivered to the transfer office.

VAULT LIST

53. Function.—The Vault List, as used in the brokerage house, is a form for recording the securities that are deposited in the safe-deposit vault, in order that the broker or his clerks may readily know, by reference to it, just what securities are on hand.

54. What It Records.—This record provides a place for recording the following data regarding securities in the vault:

1. Date of deposit.
2. Number of shares.
3. Kind of securities.
4. Name of owner.

When a certificate is taken out of the vault the following data are recorded:

1. Date of withdrawal.
2. Number of shares withdrawn.
3. Kind of securities withdrawn.
4. Purpose of withdrawal.

This record may be verified by checking it with the Securities Ledger.

55. Example of Use.—The form of the Vault List is shown in Fig. 16. If it be assumed that the securities, as recorded in the form shown, were actually deposited and with-

drawn, an idea of the manner of handling this record will be had.

The first entry records the fact that on the third of July, 100 shares of Anaconda Copper, belonging to F. H. Towne,

Deposited				Withdrawn			
DATE	NO. OF SHARES	STOCK	NAME OF OWNER	DATE	NO. OF SHARES	STOCK	PURPOSE OF WITHDRAWAL
7/3/192	100	Anaconda	F. H. Towne	7/6/192	100	Anaconda	Sale
7/4/192	300	Studebaker	J. M. Slow				
	400	Copper	J. A. Man				

FIG. 16

were deposited in the vault, and on the sixth of July 100 shares of Anaconda which belonged to F. H. Towne were taken out because of a sale.

PRIVATE LEDGER

56. Use.—Whatever is true regarding the use of the private ledger in a mercantile concern is equally true regarding its use in Wall Street.

The Private Ledger is used to segregate a few accounts from those kept in the General Ledger, and to complete a trial balance or to make a Balance Sheet correct, the balances from the Private Ledger must be used.

The Private Ledger is used in order to keep a knowledge of the income of the concern, the capital accounts of the partners, and other important business accounts, from being known to all who may have access to the books of the office. The manner of handling the accounts recorded in it is the same as for handling any other ledger account.

The Private Ledger would contain the accounts from which the true profit and loss would be known, and what accounts are included therein would be determined by the firm.

The ruling and arrangement are the same as in any other ledger.

A control account for this ledger would be kept in the General Ledger.

GENERAL LEDGER

57. Use.—Where the ledgers already explained are used, the General Ledger of a Wall Street firm contains the asset and liability accounts and the general nominal accounts. In short, it contains all the accounts not kept in the Customers' or the Private ledger, as well as controlling accounts for these ledgers.

58. Structure.—Where a Customers' and a Private ledger are used, the General Ledger is usually a bound volume. Its ruling and arrangement is that of the usual ledger sheet with the standard ruling.

CLOSING THE BOOKS

59. Procedure.—At certain periods of the year the broker's books are closed in the same manner as are the books in a mercantile concern. The balances from the income accounts in the General Ledger, along with the expense accounts, are posted to the customary temporary account called Profit and Loss Account. The final balance of this account will then represent the net profit or net loss to be debited or credited to the proprietor's account.

PROFIT AND LOSS STATEMENT

60. The form of Profit and Loss, or Net Income, Statement is given herewith. In preparing this statement, the first step is to find the operating income; from this is subtracted the operating expense, and the remainder will be the net operating income. The net operating income having been found, it is extended to the third column.

Profit and Loss, or Net Income, Statement

1.	Operating Income:			
	Commissions		......	
2.	Less Operating Expense:			
	General office expenses	......		
	Administration expenses	......		
	Branch office operating expense	......		
	Salesmen's salaries and expenses	......		
3.	Total operating expense		......	
4.	Net operating income			......
5.	Additional Income:			
	Interest on customers' accounts	......		
	Interest on notes receivable	......		
	Interest on stocks borrowed	......		
	Premiums on stocks loaned	......		
	Interest on bonds held for investment	......		
	Dividends on stocks held for investment	......		
6.	Total additional income		......	
7.	Less Additional Expense:			
	Interest on stock loans, equivalent to money borrowed	......		
	Interest on money borrowed	......		
	Interest on notes payable	......		
8.	Total additional expense		......	
9.	Net additional income			......
10.	Net income from all sources			......

The next step is to find the total additional income; then from that subtract the total additional expense, and the remainder is the net additional income. Then to find the net income from all sources, add the net operating income and the net additional income, and the result will be the net income from all sources.

The headings as given in the statement show just what elements enter into the preparation of a Profit and Loss, or Income, Statement for a Wall Street house. The data for making up this statement will be obtained from the General and also the Private Ledger, for it will be recalled that the Customers' Ledger is used to record the customers' accounts only, therefore they cannot represent any of the nominal or proprietorship accounts. Also, it is to be remembered that the profit or loss for a given period is determined by subtracting from the total income the total expense of that period; the

result represents the net profit, or income, or loss, from all sources for that period. With the exception of possibly the subcaption, Interest on Stocks Borrowed, under Additional Income, the subheadings should be easily understood.

Some might wonder how stock that is borrowed can net an income to the borrower. The reason is, as has been explained before, that whenever stock is borrowed, a cash value is exchanged. Naturally, the broker loaning the stock has the use of additional capital, so he pays interest for the use of that money at an agreed rate, therefore the broker loaning the stock receives cash from the broker borrowing and for the use of this additional capital the broker loaning the stock pays the broker borrowing the stock a certain interest rate for the use of his money. Hence stocks borrowed are a source of interest.

PREPARATION OF THE BALANCE SHEET

61. What the Balance Sheet Shows.—The Balance Sheet is usually said to show facts regarding the accounts as they stand; but in any case it is only an approximation, for no firm with a definite amount of capital invested in sundry ventures, or risks, can with any certainty say just what their true net worth is at any time, until all accounts outstanding are closed and the business engaged in has come to an end. In Wall Street this is especially true; for the broker is more or less liable to loss on his customers' accounts, because of the fluctuations in the market value of securities. Therefore, we may say that the Balance Sheet shows an approximation to the net worth of the firm.

62. Manner of Preparation.—As in the preparation of a balance sheet for a firm engaged in any other business, the first step is to prepare a Trial Balance, which comprehends a summary of the debits and credits, taken from the books of account, namely:

1. Customers' Ledger—For position of customers' accounts as to Dr. or Cr. balances.

2. Private Ledger—For position of capital accounts and income.

3. General Ledger—For position of nominal accounts.

63. Form of Balance Sheet.—The summary obtained as described will enable the accountant to subdivide the data so

BALANCE SHEET

Assets		Liabilities	
1. Capital Assets:		1. Current Liabilities:	
Value of Exchange seats	....	Stock loans	....
Value of securities held on investment	....	Accounts payable	....
Furniture and fixtures	....	Accrued interest payable	....
2. Current Assets:		Accrued salaries payable	....
Cash	....	2. Total Liabilities	
Accounts receivable	....	3. Net Resources, represented by:	
Notes receivable	....	Proprietor's capital account	....
Stocks borrowed	....	Reserves set aside	....
Accrued interest receivable	....	Undivided profit	....
3. Suspense Debits to Income:			
Exchange dues paid in advance	....		
Rent paid in advance	....		
Insurance paid in advance	....		
Advertising paid in advance	....		
Other asset items that will be charged off to expense at some later date	....	4. Total Liabilities and Resources:	
4. Total Assets			

FIG. 17

gathered into the assets and liabilities, and the Balance Sheet will appear as shown in Fig. 17.

EXPLANATION OF ITEMS

64. Assets.—In the column of assets there are only two items that demand explanation, for they are somewhat different from items handled thus far, namely:

1. *Stocks Borrowed:* Naturally one would expect such an item to be a liability. However, it is not, because for every stock borrowed there is a check for its market value given to the loaning broker by the broker borrowing, thus making the item an asset. Should the stocks borrowed be returned, then he would have an asset in cash of equal value; for the market value would be given for its return. Thus, if Broker A borrows from Broker B stock worth $500 on the Exchange, Broker A gives Broker B a check for $500 in exchange for the stock borrowed. Then, when Broker A returns that stock to Broker B, Broker A receives from Broker B the check for $500, or the then present market value of the stock. So borrowed stock is in reality an asset.

2. *Accrued Interest Receivable:* This item refers to interest items on loans due the broker from outside sources around the street, and all other sources such as loans to customers on their accounts.

65. Liabilities.—Under the heading of liabilities it will be noticed that the liabilities are all of a current nature; that is, they have an early due date. The other items listed are sufficiently clear to be understood without further elaboration.

66. Net Resources.—To determine the net resources of the firm, subtract the total liabilities from the total assets. The net resources include:

1. Investment of the proprietors.
2. Reserves set aside.
3. Profit remaining for distribution among the proprietors.

AUDIT OF A BROKERAGE FIRM'S BOOKS

PURPOSE AND OBJECTS

67. Purpose.—The purpose of an audit of the books of a brokerage firm is the same as that for an audit of any other concern in any other business; namely, to find out the actual financial position and earnings or losses of that particular firm, in order that the proprietors, bankers, and executives may have

a true knowledge of these conditions as shown by the records of the firm.

68. Objects.—An audit consists of an examination of the accounts in the Customers', Private, and General ledgers, and all vouchers and other records, along with statements of the business.

Its objects are as follows:

1. To analyze and verify the income and operating expenses for a certain period.
2. To prepare a certified balance sheet, which shows the true condition of the firm at the time of the audit.
3. To prepare a statement comparing the operating data for a period of years.
4. To ascertain whether the books have been kept correctly, by means of an examination for the detection of errors.

In order correctly to interpret the work of others in this case, it is necessary for the auditor not only to be a person with a thorough working knowledge of accountancy, but he must have a working knowledge of the accounting system as followed in Wall Street.

Just as in any other business, an audit provides a benefit, first to the proprietors, because it assures them that the books are being correctly kept; second, to the executives, in that it assures them of their effective supervision; third, to the bookkeepers and clerks, in that it assures them that their work is being correctly done and relieves them of any suspicion which might come upon them.

CONDUCTING THE AUDIT

69. Plan of the Audit.—Since no definite rule can be given as to the conduct of an audit, it is left wholly to the auditor to provide his own plan of procedure; but the experienced auditor usually has a plan, which he may change as conditions demand. He should be provided with a list of the books used, as well as definite information as to which are the principal and which are the subsidiary books. He should also be

provided with the names of those persons empowered to receive and pay out cash.

The extent of the audit will be determined by the agreement entered into between the auditor and his client.

70. Verification of Cash Accounts.—Naturally, the initial step in the audit consists in auditing the cash account. The cash on hand plus the bank balances should equal the cash balance as shown by the cash account.

To verify cash disbursements, as recorded in the cash account, the entries are checked with the returned vouchers.

To verify the cash receipts, they are checked with the bank deposits as recorded in the bank pass book. To check each individual entry in either case, the cash entry is checked with the ledger account affected.

71. Verification of the Other Accounts.—Since the Blotters used in a brokerage business partake of the nature of a journal as well as of a cash book, they constitute the record from which all posting is done to any of the ledgers in use; therefore, to verify any entry to any account in the ledgers, recourse should always be had to the Blotters. Sometimes the checking is done from the Blotter to the ledger, but frequently the checking is done from the ledger to the Blotters.

Since the Clearing House Blotter records transactions in Clearing House stocks, it will only serve as a check upon entries recording Clearing House stocks of 100-share lots or multiples thereof.

Since the Ex-Clearing House Blotter records all transactions in Clearing House stocks of less than 100 shares, also all other stocks or bonds, as well as all cash receipts or disbursements, it naturally follows that this record provides the supporting data for entries of this kind in the ledger accounts.

As the entries in the ledgers are checked they should be marked with a distinguishing mark, and when the checking is completed the open items not checked should be specially looked up. The footings of the several accounts should be proved.

72. Verifying Assets and Liabilities.—All assets and liabilities as set forth in the Balance Sheet should agree

with the ledger accounts; and it is up to the auditor to see that they are neither overestimated nor undervalued and that they are actually existing. The auditor should personally examine the securities held either for investment or for customers' accounts, also all commercial paper and the like. At all times the auditor must see that all assets and liabilities are included. Such items as invoices and unpaid bills very often are on file in the office, but not entered in the proper accounts; then, too, certain contingent liabilities, that is, uncertain liabilities, such as discounted notes receivable at the bank, disputed claims, and such items, are not incorporated in the Balance Sheet. Should this be true, the auditor should see that they find their way into the Balance Sheet.

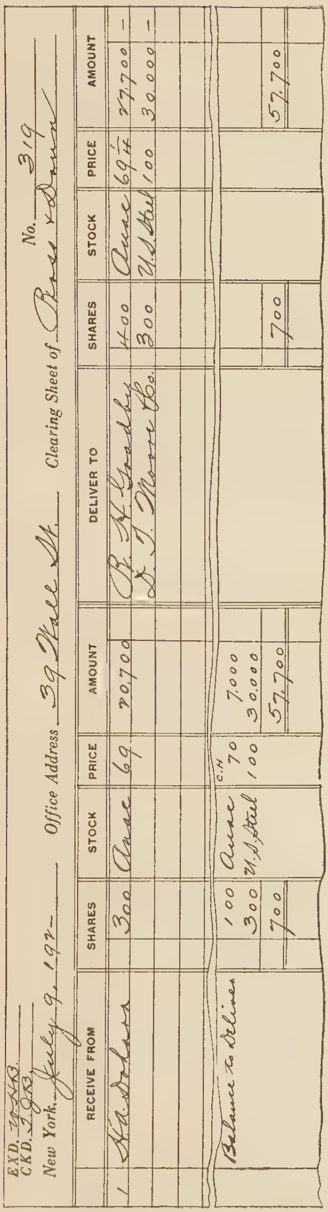
73. Verifying Income and Expenses.—By turning back to the form showing the Income Statement, Art. **60,** the sources from which income and expense items come are readily seen; knowing these, it will not be difficult to check those items of income and expense. These items should receive careful attention, and the various amounts should be carefully checked to see that the profits are not overstated, also that the expense items are all included, along with the income items, in order that a true statement of profit and loss may be obtained.

THE CLEARING HOUSE

74. Two Functions.—The Clearing House for the New York Stock Exchange may be said to be composed of two departments; namely, the Distributing Department and the Auditing Department.

75. The Distributing Department.—The Distributing Department is the department that arranges for the exchange of *receive* tickets and *deliver* tickets, whereon are recorded the data regarding the transactions entered into by the two contracting parties. This department is the medium through which comparisons of sales data are made.

76. Manner of Operation.—To make plain the method of procedure, the routine connected with the business of



EXD. [illegible] CKD. [illegible]

New York, July 9 192- Office Address 39 Wall St. Clearing Sheet of Ross & Doun No. 319

	RECEIVE FROM	SHARES	STOCK	PRICE	AMOUNT	DELIVER TO	SHARES	STOCK	PRICE	AMOUNT
1	H. A. Dobarr	300	Ana	69	20,700	R. A. Goodbody	400	Ana	69¼	27,700 —
						L. T. Moore & Co.	300	U.S. Steel	100	30,000 —
	Balance to Deliver	100	Ana	C.H. 70	7,000					
		300	U.S. Steel	100	30,000					
		700			57,700		700			57,700

Fig. 18

Ross & Doun as shown by their Clearing House Sheet, Fig. 18, will be explained. Such a sheet must be sent by the broker to the Clearing House not later than 7:00 P. M. of the day on which the business is transacted.

The sheet shows on the Receive side that Ross & Doun have bought from H. A. Dobarr 300 shares of Anaconda at 69. When this information comes to the ticket clerk of Ross & Doun, he immediately makes out a receive ticket as shown in Fig. 19, and sends it to the Distributing Department of the Clearing House, where it is put into the box of H. A. Dobarr, from which it and other tickets are collected at frequent intervals by a clerk from Dobarr's. When Dobarr's clerk receives the ticket, he immediately compares it with the data that he has on the transaction. If the ticket is correct, he stamps it with his firm's stamp and retains it to be sent to the Clearing House later with his Clearing House Sheet. On the other hand, when Dobarr's ticket clerk received information that the sale had been made, he immediately made out a Deliver ticket and sent it through the Distribution De-

partment to Ross & Doun, who compared it with their data, and, if it was correct, stamped it and kept it to be sent to the

No. 319 Our Line Number 1 New York, ________ 19____

CLEARING HOUSE OF THE NEW YORK STOCK EXCHANGE

RECEIVE FROM H. A. Dohan

300 shares Anac @ 69 $ 20,700

for account of the undersigned.

Their Line Number 4 Ross & Doun

FIG. 19

Clearing House with Ross & Doun's sheet that night. In this way the buying broker and the selling broker each have an opportunity to check up the other's memoranda of the sale.

No. 319 Our Line Number 1 New York, ________ 19____

CLEARING HOUSE OF THE NEW YORK STOCK EXCHANGE

DELIVER TO R. H. Goodby

400 shares Anac @ 69¼ $ 27,700

for account of the undersigned.

Their Line Number 2 Ross & Doun

(a)

No. 319 Our Line Number 2 New York, ________ 19____

CLEARING HOUSE OF THE NEW YORK STOCK EXCHANGE

DELIVER TO S. T. Moore & Co.

300 shares U. S. Steel @ 100 $ 30,000

for account of the undersigned.

Their Line Number 31 Ross & Doun

(b)

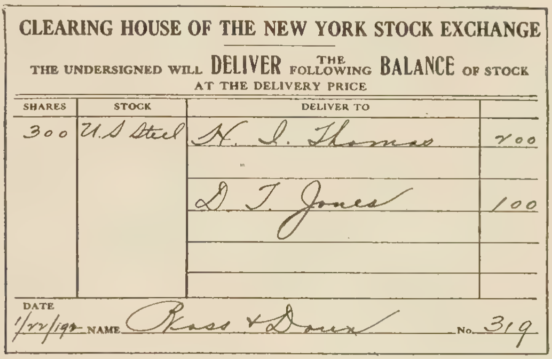
FIG. 20

77. The Deliver side of the sheet shows that Ross & Doun have bought for R. H. Goodby 400 shares of Anaconda at

64¼, and for D. T. Moore & Co. 300 shares of U. S. Steel at 100.

In this case the ticket clerk sent out to each office, through the Clearing House, a deliver ticket, Fig. 20 (*a*) and (*b*), and he received in return a receive ticket from them; the trade was compared in the manner described, and each broker retained the other's ticket until that night when he delivered his sheet at the Clearing House.

78. Balancing the Sheet for Stock.—The trades for the day having been written up from the tickets exchanged, the next thing to do is to balance the sheet for stock. As was



CLEARING HOUSE OF THE NEW YORK STOCK EXCHANGE

THE UNDERSIGNED WILL DELIVER THE FOLLOWING BALANCE OF STOCK AT THE DELIVERY PRICE

SHARES	STOCK	DELIVER TO	
300	U. S. Steel	H. I. Thomas	200
		D. T. Jones	100

DATE 1/22/19— NAME Ross & Dunn No. 319

Fig. 21

explained under balancing the Clearing House Blotter, all that is necessary is to set one entry off against the other; for instance, referring to the Clearing House Sheet, if we set off the receive item of 300 Anaconda against the deliver item of 400 Anaconda, it is readily seen that the balance to deliver is 100 Anaconda; whereas, in the case of the entry of the 300 U. S. Steel to deliver, there is no set-off for that, correspondingly, there is a balance to deliver of 300 U. S. Steel, as noted on the sheet.

A stock balance ticket in the form shown in Fig. 21 is made out for each stock, the Deliver column being left blank to be filled in at the Clearing House.

79. Entering the Stock Balances.—The stock balances having been determined, they are entered on the Clearing House Sheet, as shown in Fig. 18.

If there is a balance to deliver, as in this case, it is carried to the Receive side and entered as shown. The price entered in the price column is the Clearing House price, and the extension is figured at that price. Should the balance be to receive, then it is correspondingly carried to the Deliver side and entered in a similar manner, all cash entries in the price and amount columns being figured at the Clearing House settlement price.

80. Balancing for Cash.—To balance the sheet for cash, all that is necessary is to foot the amount columns after all stock balances have been entered completely. Should the receive footing be greater than the deliver footing, then a loss has been sustained, and a check must be sent to the Clearing House for the amount. However, should the deliver footing be the larger, then a gain has been registered, and a draft for the balance would be submitted to the Clearing House. This draft would be signed by one of the managers of that organization and returned about noon of the following day after the sheet has been sent to the Clearing House.

Having balanced the sheet completely, and having satisfied himself that it is correct, the broker sends it to the Clearing House, along with the exchange tickets, stock balance tickets, and the check or draft, as the case may be. The sheet must be in the Clearing House by not later than 7:00 P. M. of the day on which the business recorded was done.

81. The Auditing Department.—The sheet being received in the Clearing House, the first operation is that of checking the stock balance tickets with the stock balances as noted on the sheet. At the same time, the amount of the check or draft is checked with the cash balance as recorded on the sheet.

Clerks known as examiners then check all the extensions of the balances of the stocks and prove the amount columns for addition. While this is being done, the exchange tickets are taken and sorted so that all the tickets issued by any one broker

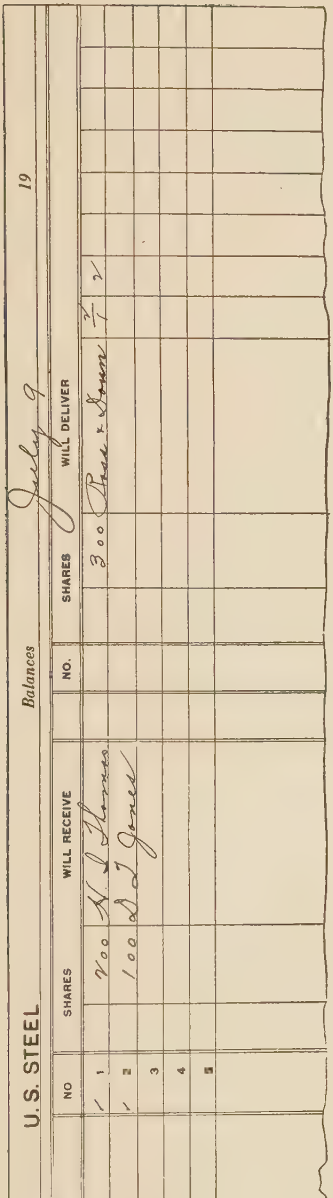


FIG. 22

are in one box. Then every entry on the sheet is checked with these tickets, as to cash, kind of stock, and name of the broker to whom the stock was sold or from whom it was bought.

While these other operations are going on, the balance tickets are entered on allotment sheets, which have the form shown in Fig. 22. As there shown, Ross & Doun have a stock balance to deliver of 300 U. S. Steel, while H. I. Thomas has a stock balance of 200 U. S. Steel to receive and D. T. Jones a balance of 100 U. S. Steel to receive. Then from the allotment as shown, Ross & Doun will deliver to No. 1, on the receive side, 200 U. S. Steel and to No. 2, 100 U. S. Steel and these allotments are entered on their balance ticket.

On the following morning the balance tickets are returned to Ross & Doun, who proceed to deliver the stocks according to the memoranda there shown. Thus, according to the ticket shown in Fig. 21, they would deliver 200 shares of U. S. Steel to H. I. Thomas and 100 shares to D. T. Jones.

From these operations as explained, it is readily seen that through the Clearing House

operation the deliveries on transactions are cut down so that only balances are necessary to be delivered.

It is also seen that consequently the checks for individual transactions are not necessary, for checks are used in payment for stock balances *to receive* only, thereby reducing the certifications at the banks as well as reducing the amount of detail office work.